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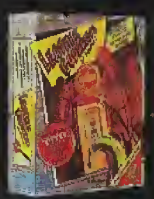

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Entertainment Editor: Phil Campbell
Advertising: Ken Longshaw
(02) 398 5111 or (02) 817 2509
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Editorial

Amiga 4000 Launch

World of Commodore Show, Pasadena - 20,000 visitors, with the privileged position of being the first Amiga lovers in the world to lay eyes on the next generation. Launched at the show was the new Amiga 4000. For about $4,000 we can expect to see the A4000 around the end of this year. Inside the 25Mhz 040 processor and new AGA chip set will be giving top end PCs and Macs a run for their money.

Although Commodore did not announce the rumoured A2200 (or whatever model the A2000 replacement ends up being), we now know what to expect. Inside this issue we have complete specifications on the A4000, and a close look at the new Advanced Graphics Architecture chip set.

The new chips address many shortcomings of the current graphics capabilities of the Amiga. After seven years, the Amiga probably deserved a little more, but what we are getting will certainly make sure the Amiga is around for a good while yet.

Commodore have started some interesting bundles involving CDTV and the A600. In the USA, you get a free CDTV player with your A3000. In Australia, user groups have been offered special CDTV deals and the first A600 pack has appeared, offering good value for the entry level home computer buyer.

Even more exciting are announcements made recently by several third party suppliers. Digital Micronics have launched a full digital video editing system called Digital Editmaster. For around US$2,500, the Editmaster can capture and play back broadcast quality video direct to or from hard disk. The implications are tremendous for the professional video market. Coupled with the SMPTE compatible Sunrise 16 bit sound card, you have a complete digital edit suite.

Some people have compared advances like the Editmaster with similar products for MS-DOS compatibles - in particular, the Video Blaster. There is absolutely no comparison between these two boards. The Video Blaster cannot capture live video, it is simply a 16-bit frame grabber. Apart from video, the Editmaster can also play full 24-bit animation in real time, using full motion J-Peg compression. Digital Micronics say the finished product will ship in the next few weeks.

Vivid-24, a 24-bit Colour Graphics Co-Processor, was also announced recently by Digital Micronics. With a potential to scream along at 160MFLOP (Millions of Floating Point Instructions Per Second), it offers Silicon Graphics performance for about one tenth the cost. This is no exaggeration!

So, things are looking pretty bright for the future. Apart from the world's major economic problems, the spiralling crime rate, falling employment levels and increasing cost of living, everything looks just great. In Amigadom, we can now safely say the next generation (and all the third party goodies about to ship) make our machine the best once again.

Andrew Farrell

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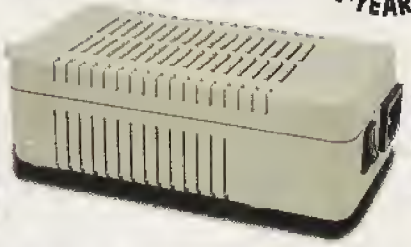

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UPDATE COLUMN

AT LAST!!! A complete home office work station for the Amiga - "MINI OFFICE". This is the perfect all-in package for your home or business and to say that we are excited about it would be to put it mildly! In fact, so much so that I am going to devote this whole column to this fantastic new product - it is an integrated package with five modules and has a Main Menu which allows you to move back and forth between different modules with ease. It also offers a unique Icon Bar System. Now the modules:

- A professional WORDPROCESSOR with powerful graphics capabilities and a 50,000 word spell checker. Ideal for a wide variety of correspondence and official documents.

- A versatile DATABASE which is simple to use and powerful enough to deal with anything from basic address book functions to club membership lists and business records.

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- Incredible GRAPHICS with more than 19 types of graphs and charts available to brighten up your presentations or make your month by month financial situation as easy to appreciate as possible. You can even make use of eye-catching 3D effects!

- A supremely friendly DISC UTILITIES program to make using your Mini Office Amiga as painless a task as possible.

Just an extra note about the Icon Bar System. This is a brilliant design approach which means that once you have used one of the modules you have effectively used them all. This will be the best $159 you will ever spend.

Pactronics Pty Ltd, 98 Carnarvon St, Silverwater, NSW (02) 748 4700

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Ram Rumbles

Media Spottings

A sudden rise in the number of Amiga sightings - space is getting tight around here - and a poem too! This month has been a busy time for hard nosed Amiga spotters.

M. James of Young reports that Alf has been sighted using an Amiga 2000 HD to invest the family's money. Meanwhile, sci fi addict and eagle eyed observer M. Beard of Petire saw Amigas in the *The Boy from Andromeda*, on Channel 2. An alien was using an Amiga 2000, single disk drive and a 1084s monitor to contact another alien. Also one of the boys was using an Amiga 1000 and a 1084s monitor.

Rhyming Sighting

This month's surprise subscription winner goes to our most novel entry ever. A spotter's poem, which tells the tale of how the phosphorous screen glowed forth yet another Amiga sighting. Here it is:

To win a surprise for the best entry
Let me tell you what I saw on Sale of the Century
It was the twenty-fourth of August, a Monday night,
When suddenly to my extreme delight,
I spied Commodore's CDTV
As a major prize it was to be,
Commodore was showing their top of the line
And the price it was going for made me pine,
To the contestant, seven dollars was said by Glen
With seven bucks in my fist and wishing I could ring there and then,
I wanted to say that for Commodore's top of the line
The CDTV had to be mine.

Thank you to R. Sollitt, of Hastings, Vic. We'll make sure you start receiving your surprise free subscription to The Australian Poets Review. For good measure, we'll throw in a copy of ACAR too!

Young Spotting

S. Pronger of Lawson NSW sends us news of a fledgling Amiga spotter. Mr Pronger writes:

"The other day my three year old daughter Elizabeth was watching PlaySchool on the ABC when she exclaimed "There's our computer, Daddy!" Sure enough, there was an Amiga 2000 in all its glory. It was being used to display a series of pictures for a story, and then to draw a picture in real time. It also appeared to have a genlock connected."

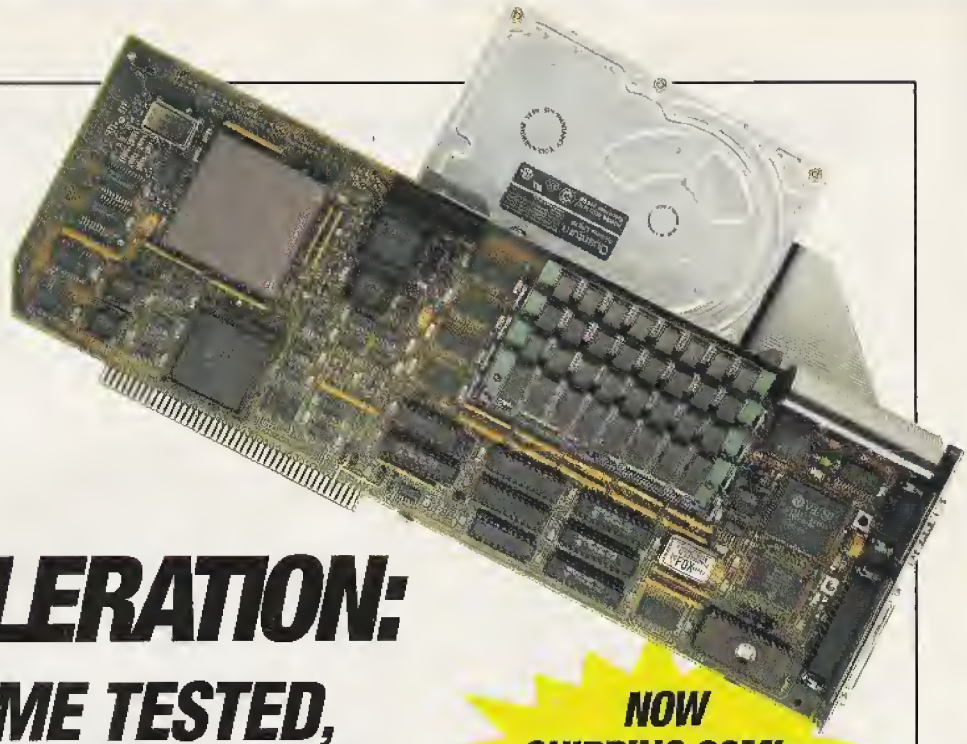
Elizabeth, a seasoned *Deluxe Paint* user, thought that her pictures were better!

"I know you're also interested to hear about Amigas being used in a professional environment. I manage an outlet of a large insurance company and we have put an Amiga to work as a point of sale product and information display. The monitor is placed on the counter facing customers waiting to be served and shows a looping presentation of various products. Originally we used *Deluxe Paint IV* and *Deluxe Video III* to create the displays, however we have recently acquired *Scala* and find this to be quicker and easier. This is one neat piece of software. I can't wait to get hold of version 2!

"Finally, I was saddened to read of the demise of P.A.U., no doubt due to the current economic climate. Congratulations on producing one of the best Amiga magazines for serious users anywhere! I hope the quality of some of the P.A.U. articles carries over to the ACAR."

Thanks for your comments, and the media moment from PlaySchool. We were also saddened at having to close *Professional Amiga User*. We hope to fill the gap as best we can in ACAR.

FOR THE AMIGA® 2000 SERIES



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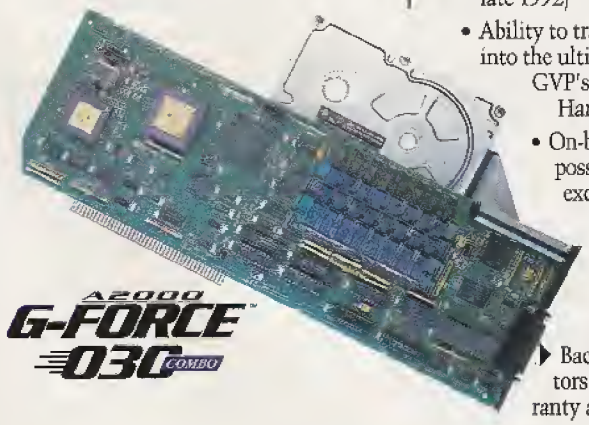

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NOTEPAD

AmiForum

The Australian Amiga User Association is holding its very successful AmiForum on Sunday 11th October, 1992 at the Parramatta Town Hall, starting at 10am until 6pm. This is the third time that this, the largest Amiga User Group Show in Australia, has been put on at the Parramatta Town Hall. It is attended by well over 2000 people each year.

If you're interested, head out and you will see all the latest in technology centred around this great machine. The cost is $5 for adults, and all children under 16 will be admitted free accompanied by an adult. Children under 18 cannot even get into a PC Show!

There will be prizes to be won, donated by the dealers. Also there will be a first class canteen operating to satisfy your hunger and thirst.

Amiga Professionals' Association

The Amiga Professionals' Association was formed in 1991 and now has 47 members, who all use Amigas in their professions. These professions include video production, music production, desktop publishing, graphic design, software and hardware development and sales.

The Association was formed to setup a network of professional users that could discuss and advise each other on the new Amiga products and assist in solving problems with current software and hardware. The Association is looking for support from all Amiga developers and would appreciate any support you can provide. To contact the Association write to Ian Shiel, C/- Media Production and Services, RMIT, Alva Grove, Coburg Vic 3095 (03) 353 9320, fax (03) 350 1259.

Scathing US news article meets positive end

A story in the US press recently attacked Commodore, claiming the Amiga has been enduring a slow death and that it would soon pass away completely. The author did not consult Commodore and he seemed to have a very one-eyed view of the Amiga's future. The interesting part is Commodore have responded strongly to the accusations made, as did a huge number of Amiga owners. The columnists commented later that never before in his career has a single editorial created so much feed back.

If you're looking for some positive signs for the Amiga's future (as if the new machines talked about in this issue were enough), check out this exerpt from a fact list Commodore US published:

- Commodore is a one billion dollar company.
- There are more than three million Amigas installed worldwide.
- Approximately 1000 dealers distribute the Amiga in the United States.
- Commodore recently signed a sole national distribution agreement with Merisel, Inc, the world's largest publicly held distributor of microcomputer hardware and software products.
- Commodore recently signed a strategic product reseller agreement with Digital Equipment Corporation.
- Commodore is focusing on four key business markets, for professional applications, in the United Sates: videography, professional training, kiosk information systems, and presentation systems. The company has significant market share in each of these business markets.
- The company recently launched an aggressive marketing and advertising campaign to support and increase its leadership position in these four key business markets. In addition, Commodore is updating industry trade editors and reporters about the company's US business strategy against these four key professional markets.
- The company plans to extend current strengths of the Amiga into consumer channels with a variety of product announcements and new consumer applications during the next 12 months.
- The company's visibility in the microcomputer industry should increase significantly during the next year as new programs, products, strategies and applications mature.
- ... we're planning some specific press events at both World of Commodore and Fall Comdex. We've also begun an intensive telephone contact campaign to strengthen our ongoing relationships with hundreds of editors, reporters, and freelancers who write about Commodore and the Amiga. We are committed to increasing the flow of accurate information to these important and influential media audiences.

How much of the above information has any direct bearing on our local market remains to be seen. It sure sounds like Commodore US have some strong ideals. Some of the distribution agreements mentioned sound very interesting indeed.

Although Commodore's current success has been based mainly on European sales, the company's stability in the critical US market is very important to future development. The majority of Amiga developers are US based. If the Amiga can't survive in the United States, developers will quickly look at other platforms.

The product announcements Commodore have made combined with their stated direction are certainly confidence boosting. I'm recommending Amiga to my friends. - Ed

Hard Disk Cafe opens new store

One of Sydney's favourite computer shops has opened a new store. Hard Disk Cafe have cloned their Mona Vale shop at Manly. The move was made for everyone who said "When the #@$%##$ are you going to open another store near us?"

"Us" being anywhere from Bulamankanka West to the other side of the Black Stump and beyond.

Mona Vale is not known for its public transport system, whereas Manly is close to the ferries, buses and Warringah Mall. Hard Disk Cafe invite you to pop by and check out their new premises - and there's plenty of good cafes nearby too! For more information call (02) 976 3533.

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Letters TO THE EDITOR

Professional Data Retrieve

I am sorry to hear of the demise of the *Professional Amiga User Magazine* but glad to hear that some of that effort will be transferred to this publication. I am self employed and have been using *Professional Data Retrieve* for several years as my business database. It is a very well presented package, easy to use and has offered good technical support. I intended to upgrade my Amiga 500 to Workbench 2 at the beginning of this financial year so I wrote to Abacus to see if I needed to update my version of PDR.

Well. I was flabbergasted to receive a three line reply simply stating that PDR is incompatible with AmigaDOS 2 and that there is no news of an upgrade. What am I to do? Is it totally incompatible or are there just a few bugs if used with AmigaDOS 2? Will PDR ever be resurrected or am I waiting in vain? What user friendly alternative can you recommend? Can I transfer my data to another database or will I have to manually rekey the entire database?

E. Zahra, Port Augusta

Ed: For local support on *Professional Data Retrieve*, call Pactronics on (02) 748 4700. Chances are you may have to look at purchasing a new database. *Superbase Professional* could import your data without rekeying. You may have to export it from *ProData Retrieve* in one of the several formats *Superbase Pro* reads.

World of Commodore

Have the organisers of the World of Commodore show released numbers on visitors to the three day show? I also suppose Commodore aren't having a show in Melbourne in the near future? Thanks for a great magazine and I look forward to reading it each month.

R. Sollitt, Hastings, Vic

Ed: Yes, 30,000 - although many exhibitors felt the number may have been less. As for Melbourne, there's no news of a show there. I'm sure Brisbane, Perth and Adelaide Amigans would also like a show - but the 4 million Sydney residents seem to have greater sway.

Action Replay

I would like to know if the Amiga Action Replay will do what you said it would do? We have a couple of games that we would like to make backup copies of, but so far have not been able to do it. So we wanted to know if this would do it or not.

Could you please tell us the difference between the MKI, II and III, which one would be best out of the three?

D. Pill, Whyalla Norrie

Ed: No it doesn't, we were lying. The review is an exageration and none of the things mentioned actually work. The difference between each model is the number of I's in the name.

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DSS Stretches the outer limits of 8-bit sound

- Create your own 4-track, self-playing musical compositions.
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- Analyze voice patterns and stereo separation.
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- Remove "pops" from old phonograph recordings.
- Create custom instruments and sound effects by collecting and/or modifying pre-recorded instruments, voice, or sounds from any source, and use them in your own compositions.
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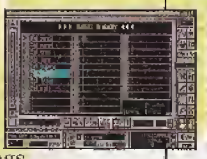


Check out these unparalleled features

✓ AmigaDOS 2.0 compatible; written in assembly language.

✓ Multi-tasking operation.

✓ 68020 and 68030 compatible.

✓ Comprehensive tutorial manual helps even beginners get started right away.

✓ Intuition-based graphic interface makes operation easy.

✓ MIDI-in capability.

✓ Direct interface between sequencer and editor.

✓ Hold 32 sound samples in memory at once – all shown on screen so they are easy to manipulate.

✓ Effects and processing capabilities include echo, mix, filter, re-sample, sound data inversion, playing sounds backwards, loops, fade-in/fade-out and more.

✓ Manipulate sound samples in real time, as you listen.

✓ Create sampled instruments with 1, 3 and 8 octaves.

✓ HIFI recording for highest quality playback.

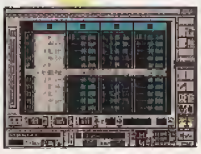
✓ Controls for faster/slower playback and filtering high frequencies during playback.

✓ Load and save samples, songs and instruments in multiple formats.

✓ Multiple effects for each note.

✓ Stereo and monophonic operation. Also convert mono to stereo or separate stereo.

✓ Auto-playing music modules.



✓ Real-time oscilloscope and spectrum analysis.

✓ Real-time reverberation.

✓ Graphic editing of wave forms through easy-to-use functions, including zoom in/out and precision controls for position, frequency and amplitude.

✓ Draw sound waves freehand using the mouse.

✓ Direct editing of individual sample numeric values.

✓ Maximum recording speed of 51,000 samples/second in stereo.

✓ Savable Preference settings.

✓ Saves in IFF, SONIX or RAW formats.

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Sound - You can sample directly into Scala

In picture mode, you can easily move screens around using the mouse - thus the name; Scala Shuffler. This is a big improvement over the old copy and move facilities, which are also still available with numerous small improvements.

Wow Wipes!

Amiga 3000 owners will be happy to know that extra 2Mb of Chip RAM can be put to good use in making some of the 25 new wipes available. All of *Scala's* famous transitions have been improved, with a greater range of speeds and hot keys to set damping, reverse, screen clear, ease in and out.

Images can stretch, flow, flip and cube into place. With the right graphics, these new transitions look truly amazing. Text crawl lets your messages fly horizontally across the screen. There is no limit to the length of the text lines - however we found there's also no way to edit long lines of text.

Out-wipes make text and brushes disappear, but these can only be accessed by editing the text script *Scala* generates. Link enables you to select several text lines to come on simultaneously.

The new transitions are smoother, more impressive and more flexible than before. *Scala* can quickly give the illusion you've used some fancy digital video effects device, or even a Video Toaster! If you're finding some transitions cause garbage to appear on the screen, check with Power Peripherals for an update.

External Modules

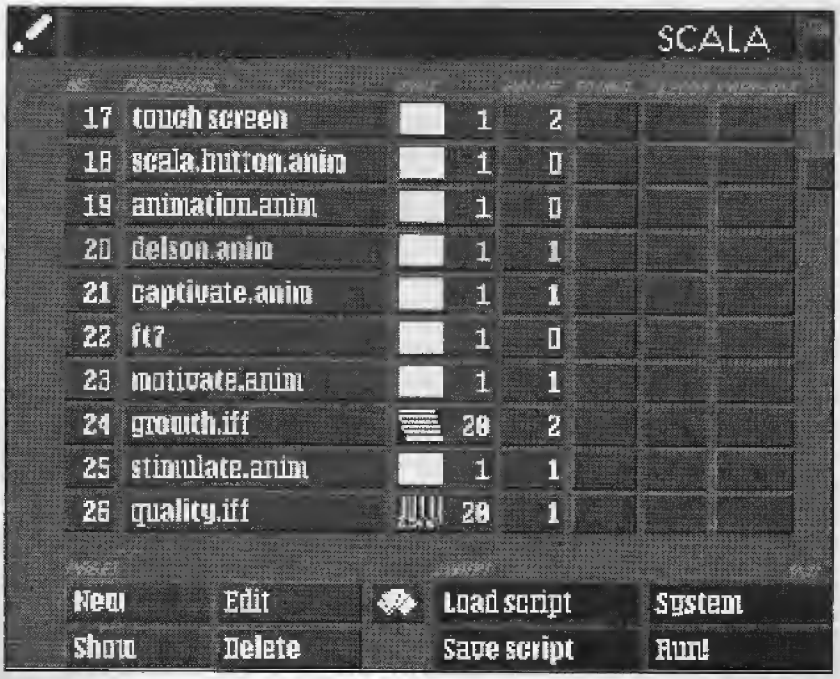
In the spirit of true multimedia software, *Scala* allows control of many external devices. This is achieved by means of EX modules - small programs which patch into *Scala* and appear on the main edit screen in their own column. You can adjust the way the edit screen is arranged making new columns appear, some with EX modules you have installed and others with additional built in functions.

Several EX modules are included with *Scala MM*, with more on the way. Some of the current devices you can control include; Laserdisk, Canon Still video, MIDI, CDTV - for 16 bit sound, and AREXX. New modules expected soon will support GVP's PVA board and the new OpalVision - which is now shipping.

Let There be Sound

Each screen may have a sound event attached, which includes the ability to

Extra Columns of Events - You can alter the width



continued on page 20

SCALA Masters.
competition

If you own Scala, you could win a GVP Impact Vision-24, A530 Turbo or second place prize - the new software controllable G-Lock genlock. All you have to do is send us a winning Scala multimedia presentation. We can accept your entries on disk, or Syquest cartridge.
More prizes for runner-ups will be announced soon!
SEND your entry to Australian Commodore & Amiga Review, SCALA Masters contest, 21 Darley Road, Randwick 2031. Make sure you include all necessary fonts and backgrounds (use the MOVE option on the SAVE requestor).

1st Prize : Impact Vision 24

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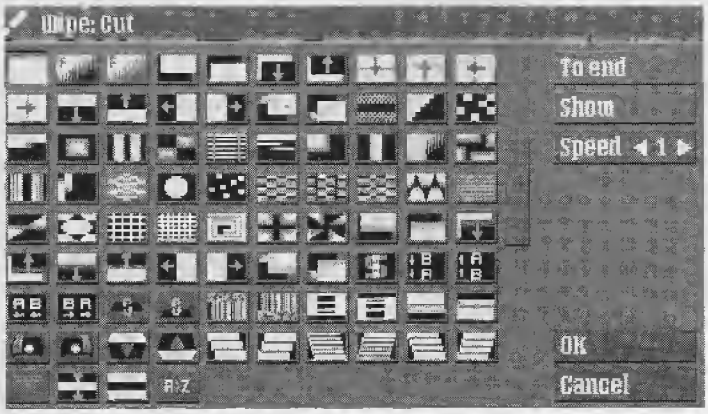

Scala 2.0 - Now includes sound, music, direct from hard disk animation playback, variables, interactive buttons, CDTV control and many more features.

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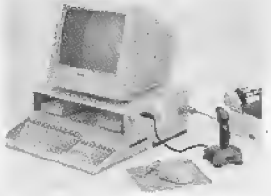

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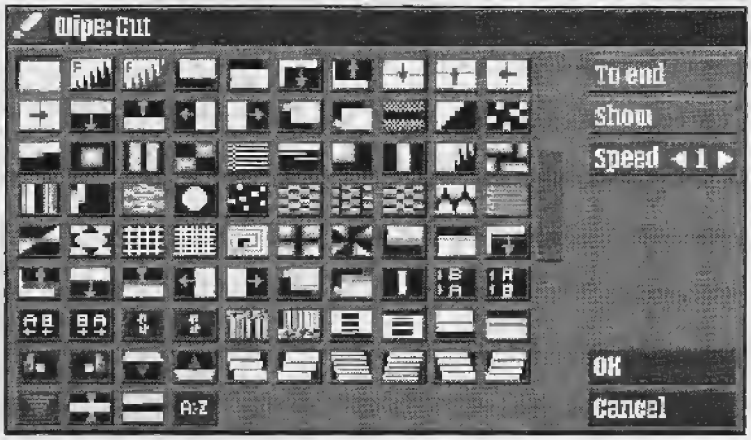

Scala has plenty of possible transitions

play 8SVX IFF Samples, SMUS, *SoundTracker* and DSS songs. You can set the volume level, fade in/out time, control balance and speed. *Scala* handles multiple sound events reasonably well. We created a large presentation with several soundtracker modules, and many IFF samples sequenced to play over the music. The sound samples simply take priority, temporarily knocking out part of the music sound track.

Animation

Like its predecessor, *Scala* is ideal for sequencing animation. The new version includes Animlab, a utility which converts and optimises animations from the standard ANIM Opt 5 format to *Scala*'s own ANIM32 or ANIM12 formats which playback much faster. Animlab can also attach a Disk Index to the file, meaning it can be played back direct from hard disk. So now you can play animations many megabytes larger than your available memory.

Not all animations will convert successfully to the new format - however those that do look very impressive at their new found higher speed of playback. Although the animation sequencing is fairly seamless, it is very difficult to obtain perfectly smooth flow from one animation to the next. There always tends to be a slight pause. With hard disk playback, this is partially solved, however the frame rate is lower.

Timing

If you're synchronising transitions to music, *Scala* has a special mode which plays your presentation, and records the interval between each mouse click as the timing for each wait. Internally, the resulting figures are stored in milliseconds, however from the edit menu they are only visible in whole seconds. Although useful, this function is frustrated by the fact that fragmented memory, vary disk access times and other oddities cause changes in the load and play times of animations. At the end of the day, trying to sync too tightly to music becomes impossible.

Interactive Buttons

A screen area can be defined as a button, and you can define a screen to jump to when the button is selected. Limited but useful logic expressions may be used in conjunction with simple variables. We set about creating a large interactive, with assorted menu, and sub-menus. The current version seemed to have some problems in this area, as well as in the use of predefined layouts. Furthermore, the ability to save a freely distributable run-time version is gone, although Power Peripherals say Scala are looking at a future variation on this idea.

If *Scala* could save a run time version of your presentation which cannot be modified, it may well be an ideal platform to develop tutorial software, hyper-media style presentations or entertainment software. Without the run time version, these low cost applications are a non-starter. The cost of *Scala MM*, with its security key, purely to run a simple presentation would make such a venture prohibitive. Let's hope they change this.

Conclusion

A program as visual as *Scala* is very hard to review. How do you explain how good the new transitions look? All I can say is wow, take a look for yourself. There are many more small improvements I've skipped over in this review. As it stands, the body of *Scala* is a polished product, with some new features that have a few rough edges. However, don't let that trouble you.

As a presentation tool, *Scala* stands tall as the most powerful of its kind. With the addition of a business graphics package, this program has the potential to make big inroads into the PC presentation market.

For multimedia work, *Scala* has no competition. The ability to control CD music, play soundtracker modules, sound effects and animation makes it the perfect digital video tool. Give me a large hard disk and fast frame grabber and this baby could even be used for assembling digital video. One day!

Scala is also at home as a video titling tool. The ability to quickly arrange text, apply different fonts style, introduce effects and sequence up a number of predefined screens makes it a powerful tool in the edit suite or simply toying around at home.

For interactive applications, I would take care you're not meeting the current collection of bugs head on. No doubt, by the time you read this I'll have another update and half of what I've said will be long gone.

Scala have filled me with confidence in their commitment to develop this product to the limit. Watch for more upgrades and complimentary add ons over coming months. *Scala* is truly king of the multimedia world.

For more information contact Power Peripherals on (03) 532 8553.

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Susan's Message Board. *" Don't be afraid to take a big step if one is indicated. You can't cross chasm in two small jumps"*

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October 93 ACAR

User Report:

Amiga 600 HD

Here's a hands on user report on the new Amiga 600 HD - the machine which looks set to replace the Amiga 500. With third party add ons due to appear soon, first time Amiga owners will soon be consuming large numbers of this little baby.

As soon as I heard about the Amiga 600 HD, I knew it was the logical upgrade from my old, but trusty 1.2 Amiga 500. I went to the World of Commodore show at Darling Harbour for the chance of having a look at the latest Amiga. Not only did I look, but unable to resist a great bargain, I bought one. At only $745, for a Amiga 600 with 30 megabyte hard drive, I knew that this once only show bargain was unlikely to be repeated in the near future.

Being a student of journalism, a computer is almost essential. It must be powerful, yet versatile; reliable and tough. The Amiga 600 HD lives up to all these expectations.

I often travel from Sydney to Canberra, where I go to University. A round trip of 600 km. My computer usually comes too, sitting in the back of a bumpy Escort van. It can't be too fragile; a breakdown before a major essay was due would be bad news.

Using surface mounted technology, the A600 HD is much tougher than its predecessors. It's small compact size makes it easier to transport, and its appearance is closer to a lap-top than a desktop computer. It oozes sturdiness.

Another hassle of my floppy disk based A500 was the constant disk swapping and slow access times. Annoying, especially when running a spell check on a 3000 word essay. In this respect, the A600 HD does very well. The inbuilt hard drive makes running serious programs a breeze.

Programs load in a fraction of the time it takes for them to load from floppy disk, and there is no disk swapping. Spell checkers become superquick; making them a realistic proposition.

It also makes it easier to store essays and assignments. Everything I have written while at University sits in its respective directory, making it easy to locate and refer to in the future.

The New Workbench

I was stunned by Workbench 2.05, which comes with the A600 HD. I have finally found an operating environment which compared favorably with Finder on the Macintosh, and *Windows 3.0* on the IBM. The boot up from hard disk, is quick and Workbench operations are fast and easy to use. Workbench up to version 1.3 was pretty dismal; not much more than a very average program selector. Workbench 2.05 on the other hand, has a professional feel and is very usable.

The keyboard is reasonable to use, despite the absence of the keypad. The A600 comes standard with one megabyte - enough to run most programs. Extra memory can be added through the trap door expansion slot.

New Enhanced Chip Set

Another reason for my decision to upgrade was the new graphics chip set present. My old A500 only had a 1.2 Kickstart ROM and 512K Agnus. To upgrade the full chip set of my A500, and to purchase a hard drive set-up, would have cost more than buying the A600. Therefore, in a roundabout way, it was cost effective to sell my A500, add some money, and buy an A600 HD.

For students, who want up-to-date gear, and are short on cash, this is an important consideration.

In comparison to other computers of the same ability, the A600 HD does well. With a hard drive and Workbench 2.05, I would prefer the A600 HD to a Macintosh Classic or PC of similar specifications. I make that judgement without even considering the price, which is very much cheaper than similar machines. The non-show price of the A600 HD with hard drive is around $899.

For student use the A600 HD is an ideal machine. Teamed with appropriate software, it is a compact and powerful word processor. Its large storage capacity and reasonable price make the A-600 HD an excellent and affordable educational tool. ●

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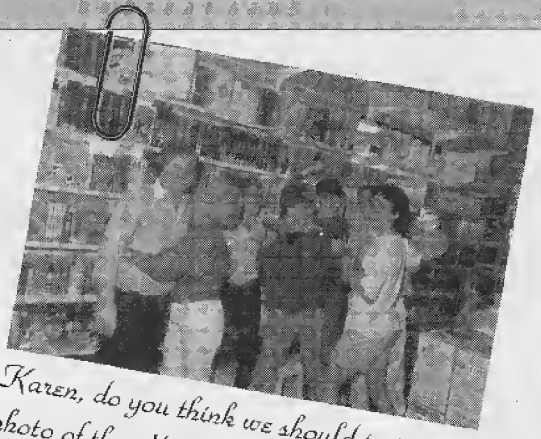

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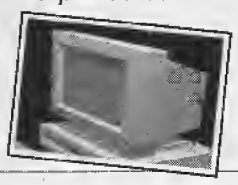

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Blitz BASIC 2.0

Jeff Wilson checked out the latest upgrade to the fastest BASIC around. Here's his first impressions.

One of the highlights at the World of Commodore show for me was being able to get my hands on a copy of Blitz Basic 2 which I had read a little about previously. Simon Armstrong from New Zealand was selling copies direct to the public at a show price of $150 - which I considered a real bargain. He was also doing some impressive demos with it to passer bys.

If you've not heard about Blitz Basic 2 before then I'll start at the beginning with a brief description. It started life as Blitz Basic, which was very similar to AMOS and was geared for speed and very unfriendly to the multitasking system of the Amiga. As it was only designed to write games, this wasn't a major problem. Personally, I didn't use the first incarnation as I'm not a games programmer and never will be.

"Well, why have you now got a copy of the new version?" you may ask. It now has two modes of operation and it's the new second mode that I primarily bought it for.

Amiga friendly

This second mode makes full use of the Amiga multitasking environment, allowing your application to happily live in memory with other programs and interact with each other if need be through Arexx ports if required. The two modes are known as Amiga Mode and Blitz Mode and it doesn't require much thinking to know which is which.

Blitz 2 fills a gap for me between AMOS and CanDo. When I tried AMOS I was most put off because it was nothing like using an Amiga interface. This was caused by the fact that it was ported direct from the Atari ST computer and a program that they called STOS. I believe that all programs should have a similar interface and therefore be easy to use.

In AMOS it was like reinventing the wheel to use such things as gadgets and menus. CanDo is at the other end of the scale and is extremely easy to use and very much a standard Amiga interface. Its only failing is that at the moment, you can't compile the code that you produce and so end up with an extra 150k of library code added to your project. This is where Blitz fits in nicely, being able to program in an integrated environment which will produce compiled code.

Up and running

Blitz comes in a large A4 size package and looks very professional. The package consists of two large manuals and the first issue of the Blitz User magazine. There are five disks, three of these being the program disks and the other two are the first two public domain disks.

If you want to see what Blitz is capable of in the games area then I suggest that you try the PD games out. These are a lot more impressive than a lot of games I saw for sale at the show. The four games on the disks are:

PD disk one; *Defender* (the classic shoot'em up) and *Zombie Apocalypse* (a bloody shoot and destroy).

PD disk two; *Jumpin' Jack* (an arcade levels type game with patten editor) and *Asmodeus* (a great example of large bobs moving in a flicker free screen).

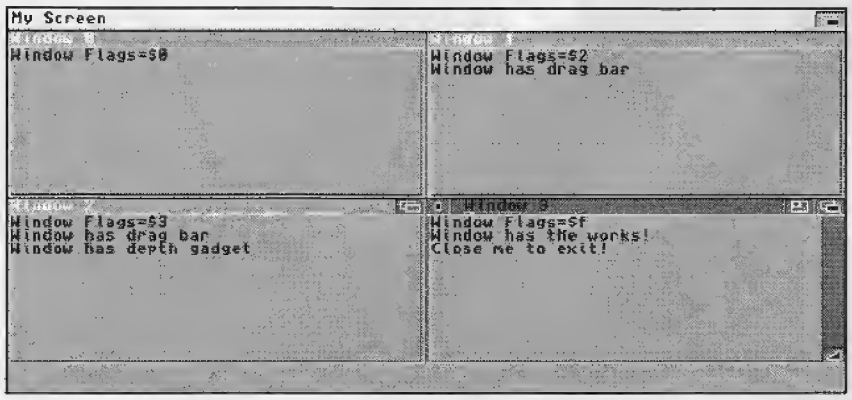
The two PD disks are accompanied by all sourcecode. This is the format that all the PD disks will come in. The next two PD disks are due out soon and these will have more games and new libraries to enhance Blitz Basic's capabilities.

The magazine will be free for the first couple of issues, but you will have to subscribe after that. I was quite impressed by its look and content and have been told by Simon Armstrong that it will come with a disk.

Documentation

The thinner of the two manuals is a User Guide with a light hearted approach to programming Blitz on the Amiga. It covers getting started as would be expected, then goes on to explain using TED, the integrated editor. C Concepts, Libraries and an overview of the Amiga are also included. The rest of the book is taken up with Tutorials which help explain some of the different modes of programming and build up your knowledge.

Chapter 4 in this User Manual is the one covering C Concepts and is included since many C programming concepts have been integrated into Blitz 2



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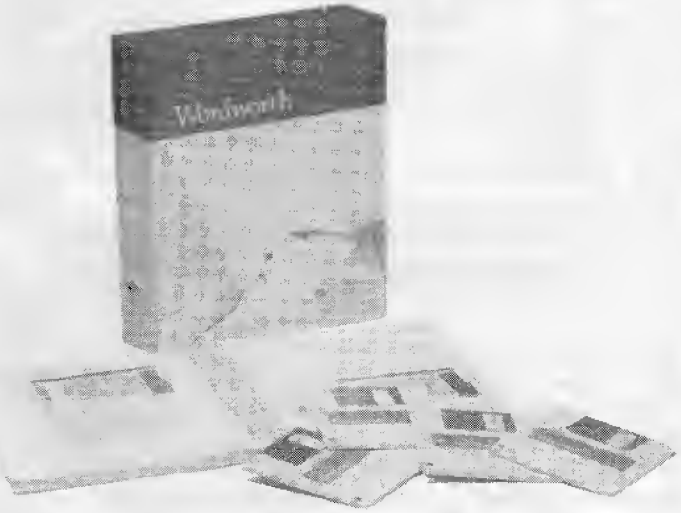

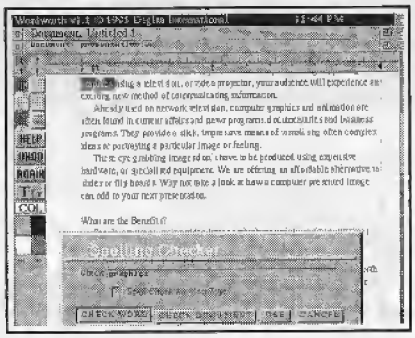

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with such things as structures (known as NewTypes) and the capability for Linked Lists (a type of array used in C). A conversion utility is included that will convert C include files and serves as an example of how Blitz 2 differs from regular C.

Structure

The heart of Blitz 2 lies in its use of libraries. There are basically four types of Library Directories contained in Blitz 2. The first group of libraries are the System Libs Directory which contains the core memory management, string, list and array handling libraries.

The second group is the Basic libs directory which contains the main Blitz 2 command set. These libraries contain all the Blitz and Amiga mode type functions and statement.

The third set comprises the Amiga libs directory and contains standard Amiga libraries, supplying token text, help text and other information necessary to the compiler. Blitz handles the loading of the library base, the parameter passing details and the return value so the user can treat any Amiga library call just like a basic keyword. Blitz 2 comes with the intuition, diskfont, exec, graphics and dos libraries in the Amiga libs directory. This set enhances the capabilities of the Blitz 2 environment vastly by giving direct access to the intuition etc, allowing the project to be completely friendly as all Amiga programs should be and also allows you to follow the Style manual when designing your program.

The last libs drawer is the User libs directory and will be made up of public domain Blitz libraries as well as any libraries you may wish to develop. I say will be as it is presently empty. As can be seen, you can develop your own libraries as long as you can program in Assembler. The conventions for the libraries is shown and there are a couple of examples in the first magazine. Updates for all libraries will be made available on the public domain.

Reference

The other manual which I haven't mentioned yet and makes up half of the package is the Reference Manual which covers all the Blitz 2 commands and conventions. All commands are explained by way of a small example of code and the commands themselves are grouped into sections such as window commands, screen commands and shape commands etc.

The initial package of examples in the user manual concentrates on the Blitz mode which didn't over excite me but I've since spoken to Simon Armstrong who tells me that from the next issue, it will be going back to basics and working its way through all types of programming. I was quite impressed by the one small example which was included. This was a little phone look-up and data base window which lived on the workbench screen.

Editor

The editor which I mentioned earlier known as TED is a completely integrated system for development. You can write your code in TED then save it, then compile and run it looking at what you just developed. One small hint is to turn on runtime errors in your compiler options and also have one pass option on as this will compile much faster. This option only needs to be turned on when making your final executable.

Another nice feature of TED is the keywords are highlighted and so makes it easy to see if you've written the right words or if you're using a keyword as a variable name which is of course illegal. Also down the side of the editor you will see all your labels from your program and so by clicking on one of these, you can be taken directly to this part of your program which is a real bonus as the program starts to enlarge. Also when you print out from the program all the keywords etc are printed in bold making the printout easy to read.

Windows

Also included in the standard package is a program known as IntuiTools which is a basic type of PowerWindows package. It allows you to design your windows and gadgets and then produces the code for you. Two other utilities are also included, these being ShapesMaker and MapEditor. The ShapesMaker program is a utility for

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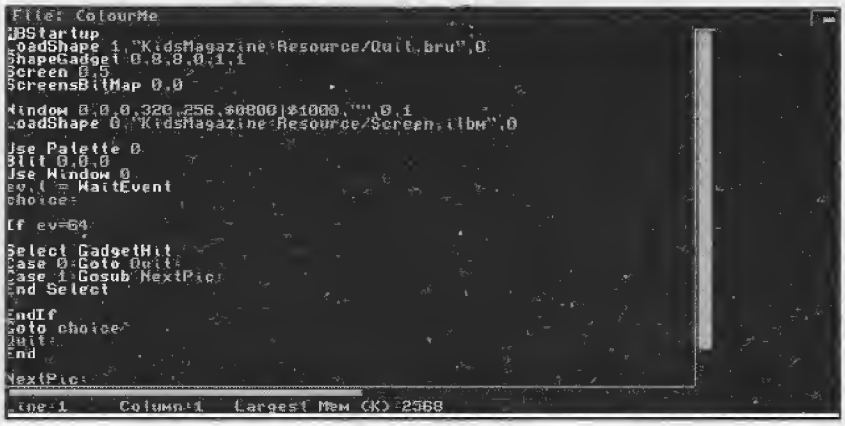
importing groups of brushes such as animations into Blitz 2. The MapEditor program allows the making of screens using the same base set of graphics and so allows for many screens with little memory use, an example of this is the Dungeon Master program.

First impressions

As mentioned earlier, this is only an overview as I've only had the package for 12 days and haven't delved into it as yet. Rest assured I'm more than happy with what I've seen so far. It would seem to answer what I've wanted in a programming environment and appears to be backed up by a very good support system.

I believe there should be a Blitz 2 area set up on the Amiga Connection BBS which will be updated directly as well as locally and will provide direct access to questions and help as well as updates.



Taking into account what comes with this package, it is very cheap at its recommended retail price of $195. Remember, after buying this package there is nothing else to buy, unlike other languages which sell their compilers and mapeditors at an extra cost.

Also this package has 3D support built in - which I didn't mention due to not having used it yet. Anyone looking at getting into programming would be crazy not to look at this package and like I said earlier, it has hooks into the Amiga libraries which give it endless possibilities. Also on its way is the Arexx support library which will enable true Arexx use. For more information call Colonial Soft on (02) 980 7723 or to obtain a copy call Hard Disk Cafe on (02) 979 5833. ●

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Hardware Review

Bridging the MS-DOS Gap

Real IBM compatibility is just over the bridge and through the Golden Gate, where the grass is greener and real software numerous. George Kimpton road tests the latest in hardware MS-DOS emulators.

As much as many of us despise MS-DOS with all its clumsy commands and awkward memory handling, there are times when the application you need to run has yet to surface for our beloved Amiga. Commodore wisely provided for this possibility with the Amiga 2000's dual expansion bus. The Amiga and PC world can be linked with a bridgeboard, allowing MS-DOS software and hardware to be used on an Amiga 2000/3000. The Golden Gate, a third party solution to the problem, offers a respectable 25Mhz 386SX based system with optional maths co-processor for around $1195.

The Golden Gate installs easily and is also compatible with either Workbench 1.3 or 2.0. It took me less than five minutes to open up the 2500, slip in the bridgeboard, boot up the supplied disks, set up my hard drive and away we went. There were a couple of little problems which were sorted out quickly but more about them later.

First impressions

I installed DOS 5.0, *Windows 3.0, Xtree Gold* and *GeoWorks* as easily as one can who isn't all that familiar with an MS-DOS system and I was off and running. Having *Windows* certainly made me feel more comfortable with MS-DOS, which I usually avoid like the plague.

This was my first experience with *Windows* even though I had heard a lot about it. It certainly is a vast improvement on a standard MS-DOS interface but somebody seems to have forgotten to tell them out there that the Amiga has had "Windows" for years. It's a funny thing but great as *Windows* is I still feel sure the Amiga interface leaves it for dead.

Back to business, what does the Golden Gate 386SX Bridgeboard have to offer us Amiga fans?

System requirements

Golden Gate will work with a standard Amiga 2000 with 1 Meg of RAM, a single floppy and a hard drive. For convenience it is advisable to have more Amiga RAM, a second floppy drive and a hard disk with at least 40 Meg, preferably more.

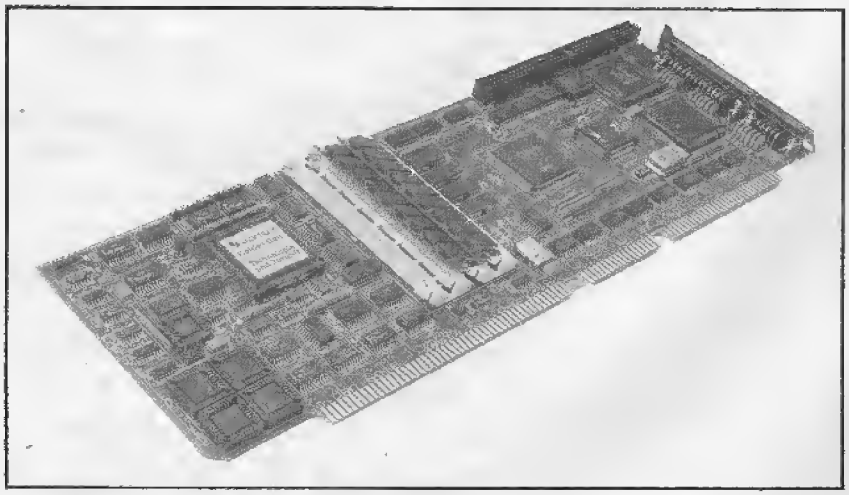
MS-DOS 3.2 or above is required. The unit is compatible up to MS-DOS 5.0 or DR-DOS 5.0 and 6.0.

I say at least 40 Meg on the hard drive mainly because of the size of the newer MS-DOS programs such as *Windows* along with your own Amiga programs. Even 40 Meg can get a little crowded when you set aside a separate partition or two for MS-DOS. A much larger drive would be a good investment if you plan on using *Corel Draw* or other newer MS-DOS software.

It is possible to double the size of your PC hard drive or partition capacity with the use of disk compressors like *DoubleDisk, Stacker* or *Superstor*. The last is supplied with DR-DOS V6 but I believe some programs such as *Windows 3.1* may have troubles with DR-DOS.

Floppies

Your current Amiga floppy drives can double as either standard Amiga drives or MS-DOS 360/720kB drives. A total of four Amiga floppies can be accessed. With the optional PC/AT floppy disk controller chip, which John Fonhof supplies normally installed, it is possible to use PC/AT 3.5" and 5.25" floppy disk drives with 360kB, 720kB, 1.2MB, 1.44MB and even 2.88MB formatted capacity. This also allows you to use the 1.44 and 2.88MB format on



the Amiga side, using the "Server" module, which could be very useful for backups.

Monitors

Golden Gate will work with your normal Amiga monitor allowing emulations of CGA (16 colours), Hercules, EGA, VGA, Olivetti or Toshiba T3100 all in monochrome and interlace graphics. If however a full VGA video output in colour should be required, as most will I imagine, a standard PC/AT EGA/VGA graphics card can be plugged into one of the PC/AT slots. The software automatically senses the presence of the VGA card where present.

With a suitable monitor connected this will give fast brilliant results, as good as any "real" 386SX PC/AT. I currently have a 1960 multisync monitor which I used for this purpose with excellent results.

Memory

In a standard Amiga with only 1MB of total memory the Golden Gate provides 640kB of base memory. If more should be required, and I am sure it will, you can either add more Amiga memory, which can be shared by the Golden Gate, or you can install up to 16 Meg directly on board itself.

When setting up, either memory can be shared within certain limits, with up to 4MB of Golden Gate RAM being used as autoconfiguring Amiga RAM expansion. My test setup included 8MB of RAM on the Golden Gate and 7Mb on the Amiga. Expanded memory managers like EMM386.exe from *Windows* can be used to set up Lim V4.0 compatible memory.

The Amiga mouse (doubling as a Microsoft Mouse), printers and modems can all be used on the PC side so no additional hardware is required for these. A clock and a small speaker are included as well as a socket for an external speaker or a SoundBlaster card can be plugged in.

Installation

When setting up your Golden Gate you will be well advised to read the handbook and the Readme File thoroughly. Everything is explained in detail from the physical installation (detailed pictures provided) to setting up the software controls which are pretty comprehensive.

I had no difficulty in following the required procedures as I mentioned earlier, but care should be exercised, as apart from plugging the Golden Gate board in, it is necessary to lift the CPU chip in the 2000 and 2500. (This mod is not required for the 3000.) An adaptor is then inserted in the CPU socket and the CPU plugged into the adaptor.

Procedures to minimise static electricity damage to chips are emphasised in the manual. Beware of nylon carpets as they are notorious for static build ups, it could be very expensive.

continued on page 36

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Installation on your hard disk is straightforward. After placing the Goldmine I disk in DF0: you switch on or reboot as necessary. After answering some questions the contents of this disk are finally copied to your selected hard disk partition. This must not be in the partition to be used for the MS-DOS software.

Hardware Compatibility

At this point if you have an accelerator installed you will either need to shut down the Caches or reset and switch off the accelerator with the mouse buttons. There is currently a PD program called CPUSET available which allows you to switch caches on or off on the fly. This can be left on your opening Workbench where I have found it quick and easy to use.

The current Golden Gate software does not support the accelerator caches on the Amiga side when booting up but has no problems co-existing with accelerators when the caches are off. Software upgrades are currently being investigated which hopefully should get around this nuisance. One other problem that may occur is that some of the older version hardware boards, such as Easyl, may interfere.

System configuration

Clicking on the Golden Gate icon opens a window which allows you to set up your system configuration for MS-DOS. Choice of language, floppy drives for MS-DOS, floppy change detection, hard disk setup, boot disk, video mode, memory distribution and use, communication ports, Bus and RAM speed and shadow RAM setups can all be preset. BIOS is supported.

After setting up your MS-DOS system you then click on the Digger icon and after a short wait and a beep the MS-DOS prompts and information appear. From this point on you follow the requests for a system disk, if booting from a floppy, or the routine to install the DOS on your hard disk. When this is complete GG will operate as a normal PC when invoked.

Should you wish to use the high density 1.44 or 2.88MB floppies for Amiga operation you set up a "Server" configuration at this time from another icon.

The system is fully multitasking and a program can be left to run on the PC side while you operate an Amiga program independently. The only limitation is how much memory you have on either side and whether it is shared. A bad choice here may create problems or just plain slow things down.

Hard disk set up

Several hard disk set ups are available. It is possible to use an Amiga file as a partition if you do not want to delegate a complete partition. This method is painfully slow and is definitely not recommended. Allocating a complete partition or partitions is a great deal faster. Up to 24 MS-DOS partitions can be accessed.

The built in IDE controller allows you to use a high performance IDE hard drive directly from the Golden Gate board. An added advantage here is that the IDE drives are cheaper than SCSI drives.

Performance

This is a true multitasking bridgeboard capable of fast and efficient operation of both Amiga and MS-DOS systems. It uses Amiga hardware such as monitors, printers, floppy drives, mouse and keyboard without the need to purchase additional hardware for MS-DOS operation.

Certainly the installation of additional components will increase its versatility but, for normal usage, these are not necessary. With the software supplied it is possible to fully work just about all MS-DOS programs that you may use at work or elsewhere including desktop publishing, transferring files and graphics from MS-DOS to Amiga and vice versa as needed, and as you wish, with minimal trouble.

Golden Gate allows the conversion of the Amiga to use high density drives capable of 1.44 and 2.88MB capacity for minimal cost. Through the ISA slot LAN controllers can be used for networking and a wide range of video compatibilities are possible. Memory and drives can be shared between both systems minimising the cost of this hardware.

It offers unrestricted operation in both the Protected and Enhanced modes so that programs like *Windows 3* and others can be operated to full capacity.

Finally from data supplied by Vortex themselves it is definitely faster at 25 MHz compared to 20 MHz on Commodore's own 386SX board. It will handle twice the number of floppies and internal memory and has a wider range of Video capabilities.In my test run I installed and operated *Windows* and *GeoWorks* without any problems and I know of a friend using the latest version of *Corel Draw* to full capacity. In fact Sydney Telecom House has two systems happily up and running converting MS-DOS graphics for display on Amigas.

Conclusions

At a cost of $1195 from Fonhof Computers (02) 639 7718, Golden Gate offers the best of both worlds in a compact package with minimal additional hardware. Certainly the basic system has some limitations for the high flyer but then they normally have to buy some pretty pricey MS-DOS hardware anyway.

I would recommend the addition of at least 4 Meg of memory on the Golden Gate (a necessity for *Windows* anyway), a VGA board, a High Density drive and a Multisync monitor. Remember though both the Multisync monitor and the High Density drive can be used on the Amiga too. Definitely a worthwhile acquisition for those who need both Amiga and MS-DOS and want the convenience of a single machine that can also run MacIntosh as well. ●

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Deluxe Paint Tutorial

Movers And Shakers

Deluxe Paint Anim-Brushes

Graham Bowden continues his useful tutorial of Deluxe Paint's many features.

Yes folks, it's here. It's the accidental fifty second fowl and no, no, that doesn't mean the first fifty-one were failures. There were no technicolour turkeys. Fifty seconds is the time taken to draw the bird.

Sure that may seem an amazingly short time to lay all those colours down but really, would I lie to you? Well, just a little bit perhaps but listen, just hang in there and I'll explain.

Anim-Brushes

This month's article deals with *Deluxe Paint 4*'s Anim-Brush facility. Besides being used to create such effects as walking or bicycle riding, anim-brushes can be used to quickly and easily create complicated and colourful designs and it's these designs I'm going to concentrate on this month. We'll look at picking up animbrushes, controlling their direction and duration to give varying effects and also a little simple morphing.

Because some animbrushes need to use a number of frames of animation on which to draw the progressive brush movements prior to picking them up, sub-meg Amigans can't create them. Sorry, but at least there is one type of brush you can make. More on that later. For those with enough memory though, how many frames are required? The simple answer is ... as many as you like or your memory allows. I've created animbrushes of up to 60 frames or cels in Lo-Res on a 1 meg A500. There are many variables which will cause shortness of memory, among them being the amount of movement of the brush, its size, the screen format being used and the number of colours or bit planes employed. A simple line drawing on a two colour Lo-Res screen would give the maximum number of frames while using sixteen colours in Hi-Res would be memory masticating. *DPaint* has no problems drawing 30 cel brushes in 10 frames of animation either. More on that ... later.

A Quick Introduction

For now, a lesson in terminology for our neophyte readers. To begin, an animbrush is simply an animated brush. That is, it's a brush which changes shape or position as it's painted down. Each step or change which the brush takes is called a cel. This is an animator's term, the original meaning of which comes from animations of old. In the early cartoon days the stages of a character's movements were painted on clear cellophane. These cellophane drawings, or cels, were then placed over the fixed background and photographed one at a time.

This method is still employed today in the better animated movies and cartoons. Today's Amiga animators have their moving characters kept in memory, to be extracted and drawn down as the mouse is dragged about. A piece of trivia here. Hands up all those who've noticed *Sale Of The Century* giving away original cartoon "cells" as a prize on the show. Will somebody out there drop them a line and set them straight next time it happens. I'm sure they'll love you. But I digress.

Sorting out a few terms

When we move on to the animbrush settings requester later we'll come across terms like duration and current. Duration refers to the total number of cels to be used during animbrush painting and can be less than the total number of cels available while current is the cel currently attached to the mouse.

Morphing - from metamorphosis - is the term used for the action of oozing a brush from one shape to another. Michael Jackson's *Black and White* video clip is one of the better examples of this art. Be aware though, morphing is not to be confused with tweening. There is a considerable difference between the two. While morphing oozes brushes from one shape to another affecting every pixel in the brush, tweening affects mostly the outline.

An example would be making an arm bend. Oozing or flowing an arm from straight to bent does not look at all lifelike. Tweening however, will look at the straight arm and the bent arm and then fill in the intermediate frames with a reasonably lifelike bending arm. The bad news is that *Deluxe Paint 4* does not support tweening but it's definitely on my wish list. How about it, EA?

The good news is that sub-meg Amigans can create morphed animbrushes because no anim frames are required to create them. As for tweening, we still may deal with it one day if I can ever wrap the old mouse's tail around Oxxi's "Spectracolor".

Making a Morphed Anim-Brush

Until then let's create a simple morphed animbrush. Hit the "=" key once to make a two pixel brush, select cycle draw (F7) and draw a short horizontal line. Pick this line up as a brush using the left mouse button then press the letter "z" to rotate it 900 degrees. Hit <Alt>-n to lock this current (verti-

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cal) brush into memory then pick up the horizontal line as a brush again. Pressing <Alt>-m at this stage will bring up a requester asking over how many cels you wish to morph. The default is 5 but feel free to set any number then click OK. Once *DPaint* finishes morphing you'll find an animbrush attached to your mouse. Try it out.

Draw a circle, a rectangle or an ellipse. Select cycle draw and do it again. Great isn't it? And did you know that progressing through the three stages of morphing has given you instant access to a minimum of three custom brushes. They are the original brush, the brush into which the original was morphed and the animated morphing brush. Alt-b will toggle between the two original custom brushes while <Shift>-b will toggle between a custom brush and the morphed animbrush.

One meg or more users can additionally call up the animbrush settings requester and select a duration of one or more cels starting with a current cel from anywhere in the particular animbrush's range. More on this shortly.

Unfortunately for sub-meg users there is no keyboard equivalent to get at this requester so you're stuck with the entire animbrush sequence. Before you go off and experiment now, let's move on to more conventional animbrushes.

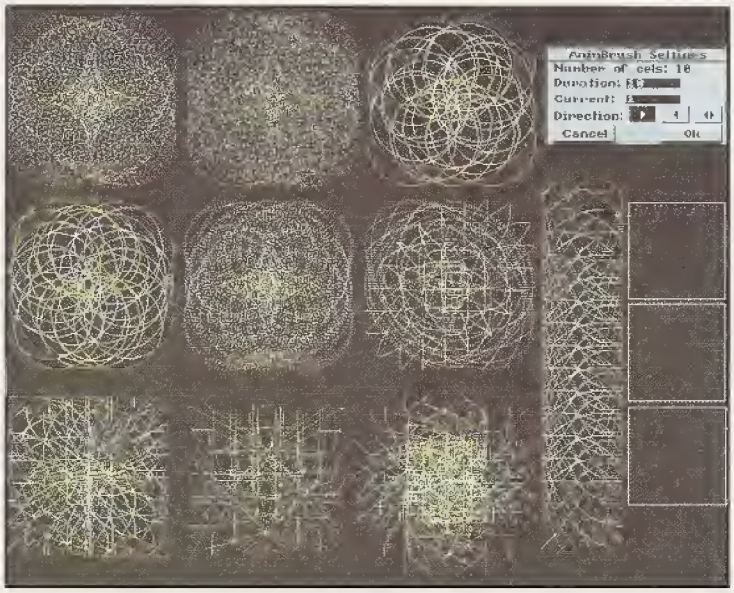


Figure 1

Conventional Anim-Brushes

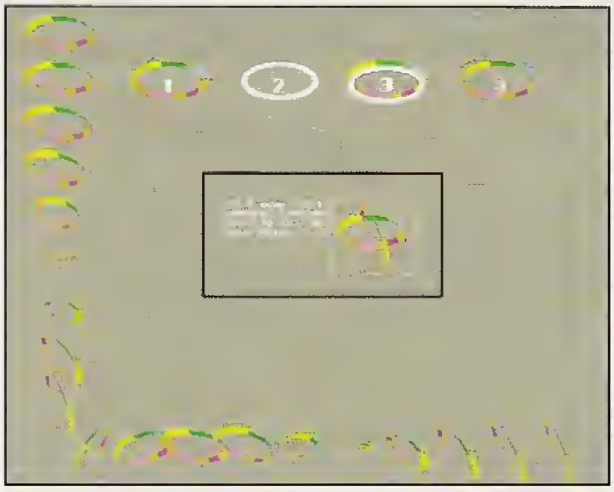
A glance at Figure 1 gives a reasonable idea of the different patterns that can be drawn from a single animbrush. The three squares on the extreme right show three random cels of the 20 cel animbrush used to draw the patterns.

The actual method used to create this animbrush will remain a mystery until a later article but suffice it to say that, as I was the one who created it, you can be sure it wasn't too difficult to do. I am, after all, the antithesis of the struggling gifted artist. I will say though that it involved anim painting and the curve tool and took probably 25 to 30 frames to create even though it's a 20 cel brush. You see it doesn't really matter if the action uses more frames than the number available. If there are 10 frames available and the action uses 18 why, it simply passes through frame 10 and steps back into frame one to continue through for a second time. Not a problem. Back to Figure 1.

I love random animbrushes. They have a surprise factor that transcends anything a standard custom brush can do. One never knows the type of patterns one will create until they're used. In this case the first thing I did after picking up the animbrush was to draw a vertical vector. That resulted in the pattern on the right. It looked pretty good so I tried a few other permutations which involved the animbrush setting requester.

From the top left I first used the Circle tool with the brush set to yo-yo. That's the lower right button in the requester and naturally enough causes the brush to step through cels 1 > 20 then 20 > 1. I called the result "The Fly's Eye". The centre pattern top row is again a circle but the animbrush was set to run forward - the lower left requester button. The top right pattern had "Current:" set to 1 and "Duration:" set to 2.

Figure 2



That caused the brush to step 1-2, 1-2 etc. as the circle was drawn. Moving down a row the left pattern again used a duration of two but this time "Current:" was set to 7 so the cels used were 7-8, 7-8 etc. Centre pattern middle row used a duration of three with "Current:" set to 10 so it stepped 10-11-12, 10-11-12. Middle row right is an ellipse using all cels (Duration: 20) stepping forward.

Down on the bottom row we have a rectangle once again using all cels followed by an unfilled polygon. The final pat-

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tern used the symmetry tool - which will probably be discussed one day - using "Cyclic" with "Order:" set to eight. They look good, don't they? Like I said, I love the surprise effects which appear with animbrushes and a little experimentation.

Now for the Chicken

And so to the slick chic chick you can draw in a flick. Don't repeat that too quickly or too often either! Figure 2 shows the stages used to produce the custom brush which was rotated over twenty frames to create an animbrush.

I began on a 16 colour Lo-Res screen, set up a 12 colour range and selected "Cycle" draw (F7). Using the second largest of the round built-in brushes I drew an ellipse. This was picked up as a brush and by pressing the F2 key was stamped down as a solid coloured ellipse over the original multi-coloured one but slightly below it.

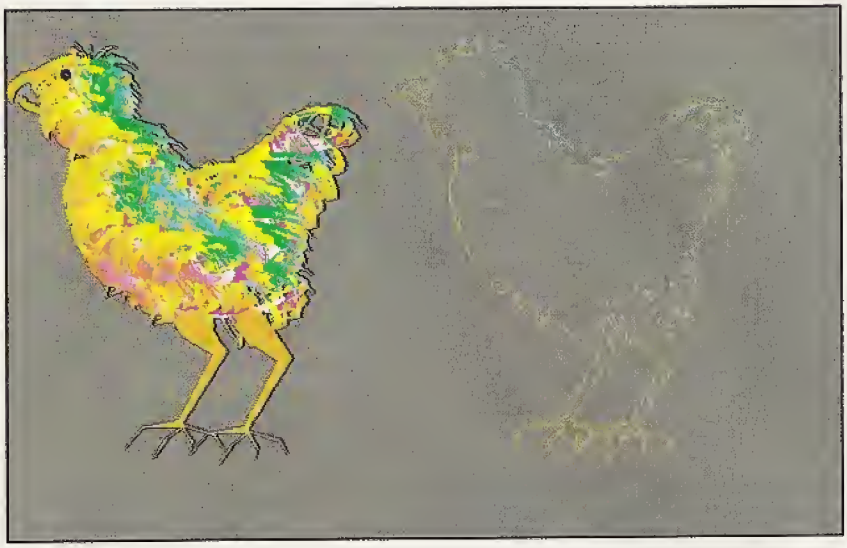

Figure 3

Filling this solid ellipse with the background colour completed the steps to the final custom brush shape. The number of animation frames was set to 20 and the brush was then rotated on all axes - that's X, Y and Z - to create the animation.

Now for some bad news. I failed to note the angles used. When a brush has been rotated on more than one axis let me tell you, it's nigh on impossible to determine what all the angles were simply by observing the animbrush cels. There they all are in Figure 2.

Anyone out there who can tell me the angles it was spun through by looking at it is worth their weight in goat's milk. There is a lesson here though that ranks way up there with "Save your work regularly and often" and it is ... If an experiment is to be repeatable, keep a note of all the variables.

Picking up the Anim

Okay, enough of that let's grab the animation as a brush. From the Anim menu I selected Animbrush>Pickup and used the mouse to outline the area of the brush. Don't forget when picking up an animbrush you need to enclose the entire area the brush has covered as it moved. Figure 2 should give you a clue. With the brush area encircled I released the mouse button and entered 20 as the number of cels when the next requester appeared. The brush was saved and that was the end of phase one.

No one said a brush couldn't be created in one format then used in another so phase two began by moving to Hi-Res mode and reloading the animbrush. From the Color menu Palette>Use Brush Palette was selected and then it happened. The surprise factor. I was doodling around with this animbrush when it occurred to me that I had the shape of a quite colourful chicken. It was only a dinky doodle too. Probably took no more than fifteen seconds.

Hhmm! thought I. I'll add a pair of legs and use cel one of the animbrush as a solid coloured brush to make the beak more realistic. A small, black, filled circle with a two pixel white highlight for the eye then pick the entire thing up as a custom brush. Time taken? Fifty seconds of course, would I lie? Yeah that's right, I didn't include the period taken to create the animbrush but hey, at least I've told you now. Then there was one small embellishment I added. I outlined my chic chick in black and added an outlined only version. More on that, you guessed it, later.

For now. Ciao. ●

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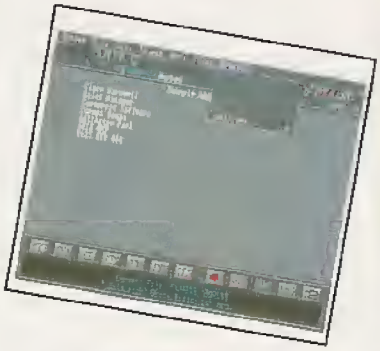

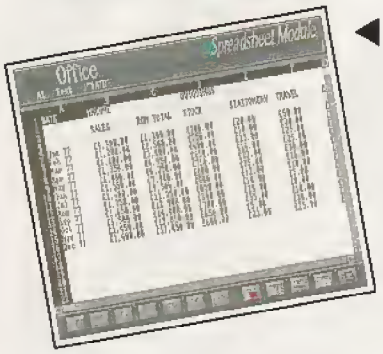

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- 50MHz 68030 with MMU, clocked at 38MHz for reliability
- 50MHZ 68882 math co-processor clocked at 50MHz
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- Reliable surface mount design.
- Hardware and software selectable 68000 mode.

Amiga 500/2000 **$1575**

The 38 Special comes out of the box with enough horsepower to compete with the fastest 68030's. This less modular approach requires that you purchase the 50MHz 68030, 50MHz 6882 and 4 or 8MB's of optimised 32-bit RAM, all installed at the factory. (Dubbed the 'Flying Wedge' a 38 Special installed into an Amiga 500 out-benchmarks an Amiga 3000 by 40%!)

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Low-cost, modular and variable frequency 68030 accelerator that replaces you 68000 CPU.

Supports a 68030 or 68EC030 microprocessor at clock frequencies of 20 to Supports a 68881/2 math co-processor at clock frequencies of 20 to 50Mhz 512K, 1M or 2MB of Static RAM to be added for general use as well as hard remapping of Kickstart ROM (1.3 or 2.0), which acts as a cache for the OS. 8MB's of additional 32-bit DRAM can be added with the CSA Mega-Memo board. Reliable surface-mount design. Hardware and software selectable 68000 mode.
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Accelerator can be purchased with just the 68030 installed or with a math co-processor, Static RAM and/or a Dynamic RAM daughter board.
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Kitware Kit + Tools + Time = SAVINGS!

Yes, on top of Shareware, Licenseware, Freeware, Giftware, Beerware and all the other little baby-Wares, the hapless consumer now has to file away yet another species in his overstretched brain. Daniel Rutter found there is a way to save money on hardware add ons from one of Australia's own third party hardware designers.

Kitware, comes from the ever-productive mind of Norm Jackson of MegaMicro Technology, a man with an impressive pedigree in Australian Amiga hardware design. The basic concept of Kitware is Public Domain hardware - the hardware designer releases full instructions and specifications for whatever the gadget is, and also makes available at reasonable cost any esoteric parts, while surrendering most, or more probably all, copyright to the design. It's not the way to make big bucks, but it enriches the computing community no end.

MegaMicro's current flagship products are the SCRAM line of SCSI interfaces and RAM expansions for model 500 and 2000 Amigas. These devices, one of which I own myself, are so reliable that Norm has not ever, not even once, had one returned faulty - this is a record that very few companies can emulate, though not for want of trying.

The best thing about the SCRAM is its price - any way you look at it, $279 for a fast SCSI interface which will happily drive hard disks, Syquest removable HDs, tape backup drives or CD-ROMs, and also offers 0, 2, 4 or 8Mb RAM expansion in low-cost ZIPs and a future upgrade path to a 68030 accelerator board (imaginatively titled the SCRAM Jet) is a darn good deal. It appeals enormously to the traditional Amiga market of people who have more sense than money, and it has sold accordingly.

The Kit Solution

The big news is that if you're willing to put in the assembling spade (or, more precisely, solder) work yourself, you can now get a Kitware version of the SCRAM 500 for $100 less - or even more off if you supply some parts yourself.

This difference may not seem much to the A3000 users, but to the bulk of battling 500 owners who want a "real" computer but don't have major money, it's a dream come true, bringing plenty of RAM and the joy of hard disks into the reach of the common punter.

Of course, kit assembly's not for everyone - you'll need a fine tipped iron, a steady hand and a bit of practice on less valuable kits - so MegaMicro still sells the pre-built model.

I assure you kit building is not purely the province of technicians, and the skills involved aren't that difficult. Indeed, you'll find that there are plenty of other electronic devices (hi-fi amps, automotive electronics, alarms, battery chargers ...) that can be easily built at home for plenty less than store prices; this could be the start of a very cost-effective hobby!

Small Guys Fight Back

Why has MegaMicro decided to, apparently, cut their profits by releasing the SCRAM in such a low-profit way? Well, Mr Jackson's motivation is explained in the following brief excerpt from the Kitware documentation - take it away, Norm:

"Hardware companies have a tough life - heavy R&D costs to get a product developed followed by an incredibly expensive advertising campaign to get it recognised. There are often casualties in this primitive struggle for market share. Good products fall by the wayside and users end up with unsupported products after the manufacturer has folded his tent. The result of this is that we get a hardware market dominated by a couple of BIG companies surrounded by a gaggle of strugglers.

"The big companies invariably seem to contract IBM disease - they adopt a three letter name and become conservative. What we tend to get from IBM Syndrome companies are polished, safe and expensive designs. Corporate style often manages to stifle innovation. Look at Apple - from spunky garage company to hopping in the sack with IBM."

In Mr Jackson's effort to avoid IBM Syndrome, he's invented Kitware, and it's up to us to show him that this novel approach to the field is a smart move. All good PD libraries should carry the SCRAM 500 Kitware disk (two other disks for the SCRAM 2000 and SCRAM Jet should appear soon).

On it you'll find archives containing digitised pictures of the

MegAChip 2000/500

If you use Amigas for Desktop Video, 3D Rendering & Animation, Multimedia or Desktop Publishing - Then you need the MegAChip 2000. Doubles the amount of memory accessible to the custom chips. Uses the 2 Megabyte Agnus that's in the Amiga 3000. Greatly enhances graphics capabilities. Fully compatible with Workbench 1.2, 1.3, 2.0, and the ECS Denise chip. Fully compatible with Video Toaster and other Genlocks and Framebuffers. Fully compatible with GVP's and Commodore's 68030 accelerators. Why upgrade to 1meg of Chip RAM when you can have two meg of chip RAM like the A3000?
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"In operation MegAChip is completely transparent except that it gives you more space to perform graphic- and audio-intensive operations. With it you can have up to ten megs of RAM instead of the previous limit of nine."
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"MegAChip is MegAGood, and with Scala MM200, you can have a marriage made in heaven."
Marshall White, Amiga Artist

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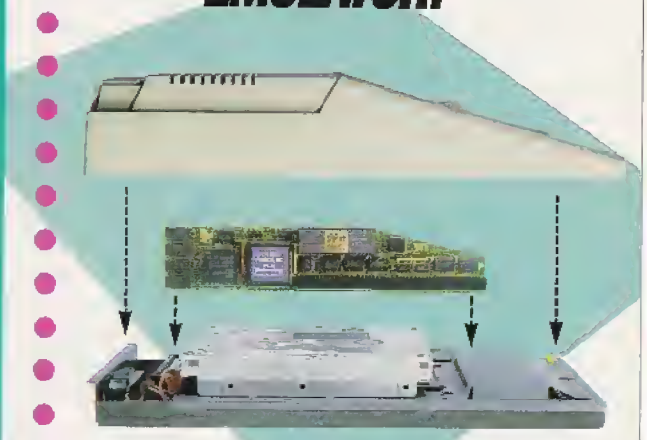

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- Run PC and Amiga applications simultaneously.
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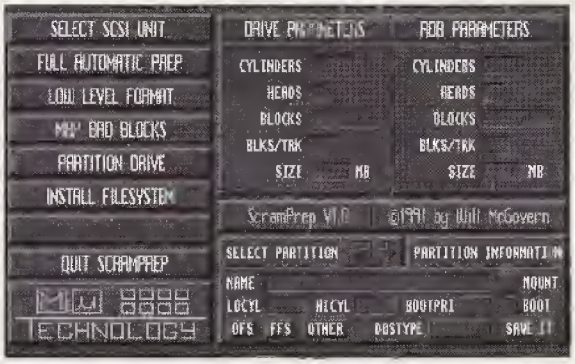
SCRAM unit and its component parts, very complete instructions for assembly, troubleshooting and parts location, an explanation of the Kitware concept, an order form, a load of HPGL CAD files so you can use a plotter to produce your own PCB overlay, and the full SCRAM manual. It is a particularly good manual if I do say so myself; the paper version (see below) even includes complete circuit diagrams so even the dimmest tech should be able to get the hang of fixing a busted SCRAM - in the unlikely event that one should break.



Software

On top of that, the magnificent SCRAMPREP program is also included free. Even if your hard drive isn't driven by a SCRAM, SCRAMPREP will still serve all your requirements for drive formatting, mapping and partitioning. It's a very easy to use and elegant program, and as such fits in neatly with the rest of the SCRAM package.

Bits and Pieces

Technical wizards might like to use their own ingenuity and store of parts to cut even further the cost of the SCRAM; MegaMicro has no objection to this and so will sell all the parts separately. The double-sided main PCB, for people unwilling to plot and etch, is $29, and includes the board, paper manual and one of the almost impossible to find 86 way edge connectors.

The custom chip set (Bertie, Griswold, Humphrey, Cyril-8 and the SCRAM-8 EPROM), which would be VERY hard to work up yourself, is $39. The extender card, which is the bit which connects the SCRAM to the computer, is $19 for the PCB, terminating hardware and second 86 way edge connector.

The SCSI chip (DP8490V PLCC), another sod to find for the small operator, is $19 and comes with a 44 pin socket. The extruded aluminium case, along with front and back panels, label, screws and spacers and RF shield is $49 - it's not necessary if you don't mind having a nude computer, but it does keep things safer.

All of these parts together - so you just have to add common components like caps and resistors - is only $149. Add the common parts and you're up to $179. Or of course you can still buy the complete, built and tested model, for $279. A pass-through kit, to allow other expansion port peripherals to be plugged in, is $19.

Adding RAM

MegaMicro also sells 1Mx4 ZIP DRAMs, which for the uninitiated give 512K of RAM each and suit the SCRAM, for $35 apiece; my advice is to go to a memory specialist like Pelham in Sydney (980 6988), who'll sell you the same thing for less than $30 including sales tax; a significant saving when you're getting a few megs.

On the whole, the SCRAM 500 has everything in its favour - it's tough, cheap, totally reliable and works easily first time. What more could you want?

MegaMicro Technology may be contacted at PO Box 272, Pennant Hills, NSW 2120, or call them on (02) 980 6986, or fax on (02) 980 7598. ●

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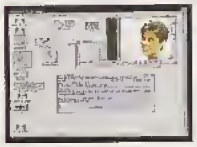

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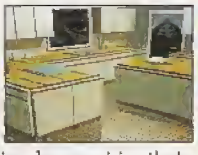

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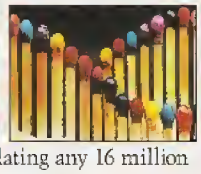

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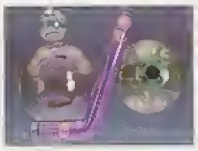

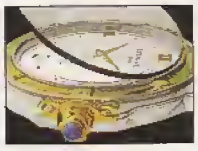

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Education

Beating the RECESSION

by Stan Nirenberg

In these recessionary times, we are all on the lookout for better value for our hard earned money. The price of commercial software has been falling for quite some time, as has the cost of hardware. However, this has often been at the higher end of the market; the price of games and educational software has at best been stable, and in some cases on the rise.

Software on the Cheap

There are alternatives for those who do not not want to spend $50 dollars or more for software. We are no doubt all familiar with the concept of public domain and shareware. Public domain, or non-copyright software, may be freely used without paying anyone for the privilege (other than the cost of a disk, duplication and postage to your local PD library).

Shareware is a "try it and see" approach to the distribution of software. You can go along to any PD library and buy a copy of a shareware program. If you like the product, then you are obliged to pay the author some money (usually about $25), but if you are not impressed then you simply stop using the program!

Another way of bringing new software to buyers has recently been introduced in Australia. It is called Licenseware and lies somewhere in between shareware and the considerably more expensive commercial products. This idea was first introduced in Britain to help talented AMOS programmers get their product to the users whilst ensuring a good deal for both programmer and the buyer.

A licence fee is already included in the sale price of the software, unlike shareware, ensuring that the programmer gets rewarded for every sale. This encourages continuous development and results in good quality software being available to the public. Because the production costs are low for this setup, the price of the software is also very reasonable.

Local Suppliers

Deja Vu Licenseware is distributed in Australia by Allen Computer Supplies in (outer) Melbourne, Victoria and can also be purchased from various software outlets. The current catalogue (ring Allen Computer Supplies on 03 725 3379 for a copy) lists 86 titles on various subjects, including games, utilities and education. The best part is that they retail for only $14 each.

I had a look at five of these titles which fall in the category of educational software. In general, I found the quality to range from good to excellent, and it certainly compares very well with the commercial product, but at a fraction of the price.

The graphics are perhaps not quite as polished as the very best commercial games, but I have come across many commercial titles that were very poor indeed. Unlike commercial products, the software comes in a shrink wrapped cardboard envelope with no printed instructions. However, the disks are self booting (which means you simply insert the disk in the drive and turn the computer on) and all necessary instructions appear on screen as required.

The five educational games I reviewed all required 1MByte of RAM, which is true for the majority of the games in the catalogue (although some will work on 512 KByte Amigas).

The Word Factory

The *Word Factory* is a spelling drill game with a choice of words of four, five or six letters. A word is shown for five seconds, after which the child has to spell the word. As each letter is chosen from a window using the joystick, it is deposited onto a conveyor belt. When the right number of letters has been deposited on the conveyor, the word is packaged into a crate. If the word is misspelt, the correct spelling is shown and another chance is given to build the word. Ten words must be spelt correctly to fill the truck, which is shown at the end of the segment.

The graphics are very well drawn and the sound effects are reasonable. However, the game is not particularly exciting as there is no variety. Some animation is presented before each word is spelt, but, it becomes obtrusive after a while because it slows the game down. There is also some animation after the word has been completed and the blocks are loaded into the crate.

The game is obviously designed for children who have some ability to read, but with a parent's help, younger children can also be amused. Overall, not a bad package, but probably requiring some parental assistance to entice children to play for any length of time.

Music Box

This program allows the user to write up to four lines of music in proper musical notation and then to play it back through the Amiga's sound chips. There are three parts to the software. The first is a mini music tutorial which explains about music notation: note names, type of notes and rests, time signature and the musical staff. The second part simply explains how to use the program.

The third part is the program itself. The main screen shows four staves with sixteen bars drawn. Using the mouse, the user can pick up notes and rests of various length and write them on the music staves. The program will ensure that no more notes than can fit in each bar can be written. After the notes are all entered, the user can play the music through the Amiga using any one of eleven instrument types for each of the four channels. Note that the music is limited to only one part, ie, you cannot play different note through the four channels simultaneously.

Music can be saved and retrieved from disk. In fact, a number of sample songs have been provided for you to experiment with. Another feature is the ability to use the top row of the Amiga keyboard as a piano keyboard to play live music, although it cannot be used to record onto the screen.

This program would be suitable for introducing children to music notation and can be a fun and easy way to make sound with your Amiga. The program is very easy to use with all commands controlled by the mouse. Note that the program has not been designed for serious musical composition.

Play It Safe

Play It Safe aims to teach safety in the house and surrounds. The story starts when a whole lot of gremlins enter your child's house and make it unsafe. The child, with the help of the parents and a cutely animated teddy bear (the mouse pointer in reality), identifies potential hazards. When a problem has been identified correctly, a little message comes up which can be the basis for discussion between child and parent. Also, the teddy bear adds a jigsaw puzzle part to his collection until all five hazards are found and a gremlin is exposed.

The game offers variety, good graphics and animations (particularly the teddy bear) and music and sound effects well suited to the target age group (four or five and above). The game is easy to play, being completely mouse driven, and is good fun, particularly when the parents become involved.

Rocket Maths

This game drills children in the arithmetic skills of addition, subtraction, multiplication and division. The game comes in four stages and three levels of difficulty, requiring the player to send a rocket through space by solving 30 problems.

The first stage of the game sees an astronaut beamed aboard the rocket and the spaceship launched after the first ten problems are solved. Next, the player navigates the rocket through the planets by solving a further ten problems. The third stage requires the navigator to correctly solve another ten problems to avoid hitting the stray asteroids. The final phase of the game is an arcade sequence that requires the

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spaceship to be safely landed. An accurate landing gains the pilot bonus points. The game is repeated from stage one at a greater level of difficulty until all four lives are used up.

The game is totally controlled by the joystick to choose the answers to the problems and to land the rocket. The graphics are good, the animations are somewhat uninspiring, the sound effects good and overall, not a bad game.

Big Top Fun

Now we come to my favourite game of the set. Every so often, someone manages to put together a piece of software that has all the combinations that make it a truly great effort. *Big Top Fun* is a collection of four games designed to teach children about the English language, particularly spelling. The game is set at the circus, with the background in all games being an audience watching the entertainment in the main ring.

The first game is called *Word Balance*. A juggler on a monocycle comes into the ring holding a card with a picture on it. The child is presented with eight other cards with pictures. If a matching picture is selected, the clown goes off to the cheers of the crowd, otherwise he drops the card.

Matchplay is a concentration type game - hidden pictures are located under a number of cards. The object of the game is to uncover two cards at a time and hopefully match the pictures. Pictures are used at the easier level but at the most difficult level a combination of pictures and words is used.

Seal-a-Grams is based on unscrambling mixed up words. A number of seals hold up cards with different letters of the alphabet. The object is to swap the letters so that the word is spelt correctly. If the child gets into trouble, a picture of the word can be viewed for a short time.

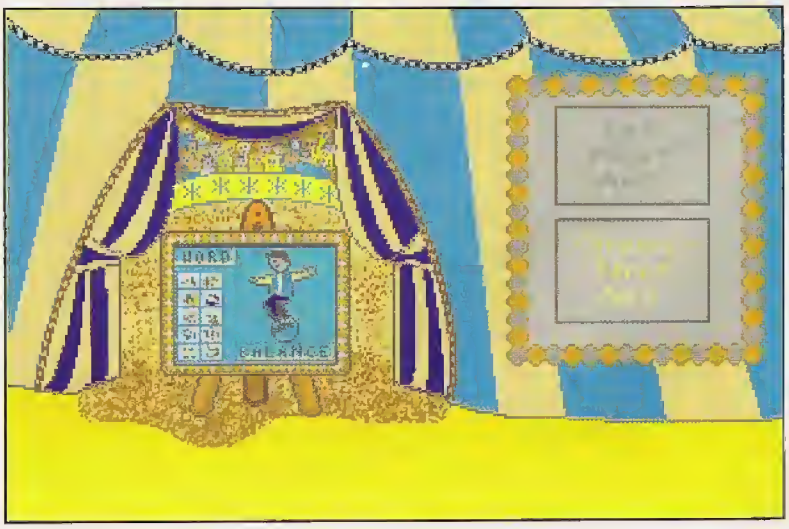
Probably the best of the four is *Balloon Burst*. In the bottom of the screen, a picture is presented while a whole pile of colourful balloons with letters of the alphabet on them are let loose in the tent. A clown with a pistol is sent to shoot the balloons to form a word corresponding to the picture.

This is an excellent piece of software. Apart from the good graphics, animation and sound effects, there is positive reinforcement of correct answers when the audience claps and cheers. Wrong answers are not punished and the child is allowed to correct his error. I tried this game on our four year old, and although he cannot read to any great extent, he enjoyed the game because it was fun to play. I suggest that you have a look at this game for yourselves.

Conclusion

Deja Vu Licenseware presents another good alternative to commercial software. The titles I have reviewed have been well executed with good graphics and sound. Perhaps not as polished as some of the top commercial games I have seen, but better than many that are selling for $50 or more. At $14 apiece, it is worthwhile checking them out - you might find the very game that you have been looking for!

As usual, your comments and suggestions are most welcome. Please write to me c/o ACAR or directly to PO Box 136, Forest Hill, Victoria, 3131. Until next month, have fun with your Amiga. ●



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AMOS Column

Importing pictures, music and sprites

by Wayne Johnson

Firstly, thank you to all who have contacted me on the AMOS hotline (02) 748 4700, over the past few months with ideas and suggestions for this column. It is written with you in mind and so it's important to address the issues that you wish to read or learn about. Your calls have been appreciated.

A change of pace for this month. We are going to look at different techniques for importing pictures, music, assembler code, and sprites into your AMOS programs, and a few little problems that people have.

Importing Pictures

PROBLEM 1.

The dreaded "Can't fit picture in the current screen" has annoyed many. I receive calls from people who just can't load anything that they have created in *Dpaint*. Many hours of work can go into a piece of art and end up not loading into AMOS, when the truth is that ANY picture (see this month's news) will happily load. The reason some pictures don't load is because AMOS is expecting it to be the same width, height and amount of bitplanes as the current screen. If you try to load a HAM, interlaced picture into a screen that is 200 x 150 and 2 bitplanes deep, AMOS can't load it.

The solution is to CLOSE THE CURRENT SCREEN! Try the following:

```
SCREEN CLOSE 0
LOAD IFF FSEL$("",0
```

Up will pop the requester and from here you can select any type of picture you have created.

PROBLEM 2.

The second hassle people seem to have is that their pictures load in with the colours mangled and the picture slightly scrambled. This is simply because the picture has been saved out with the stencil turned on. The AMOS system does not cater for stencils and so interprets the rest of the file incorrectly. The solution is to load your IFF picture back into your paint program, turn the stencil off, and resave. Your picture will load into AMOS without any problems.

Sprite Problems

I usually recommend that people use BOBs rather than Sprites for their work. However, the very presence of mid to large sized BOBs on the screen chews processor time so badly that it is hard to achieve smooth results as described in one of my earlier columns. Sprites will give you access to smooth animations and effects but to use them takes a bit of responsibility and care.

PROBLEM 1.

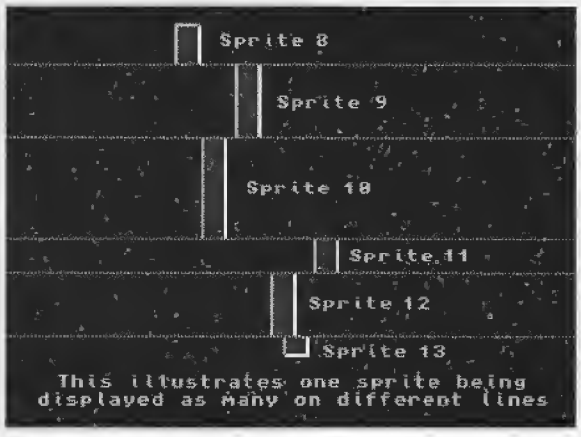
Hence, the most common call I get about Sprites, "My sprites always come up with the colours all wrong. As BOBs, they're fine!". And this is true, but it's not the AMOS system that does this, but the actual Amiga hardware. Sprites use colours 16 and higher. The chart below best illustrates the sprites' use of colour:

```
Sprite 0 & 1 uses colour 16 - Transparent
          17 - Colour 1
          18 - Colour 2
          19 - Colour 3
Sprite 2 & 3 uses colour 20 - Transparent
21 - Colour 1
          22 - Colour 2
          23 - Colour 3
Sprite 4 & 5 uses colour 24 - Transparent
          25 - Colour 1
          26 - Colour 2
          27 - Colour 3
Sprite 6 & 7 uses colour 28 - Transparent
          29 - Colour 1
          30 - Colour 2
          31 - Colour 3
```

So by this it's fair to say that sprites cannot all be a different colour. They share colours in pairs. All can be the same colours, and each pair can have a different set of colours. Make sure after you set your colours and load them into AMOS, that you perform a GET SPRITE PALETTE.

PROBLEM 2

"I can only get sprites 0,2,4, & 6 to appear on the screen!". The reason this occurs is that your sprites have more than three colours in each. The Amiga detects if your Sprite images contain more than three colours and if they do, it will combine each pair of sprites together to give you 15 colour sprites. Hence, you only can display 4 on the screen on any line. See the illustration below.



"But my sprites Do only have three colours in each!!", I hear you cry. Your sprite images, in fact, use three colours but there are more there. The reason is that when your sprites were created they were made with either the lower colour registers, the wrong colour registers, or the final file was saved out with more than 4 bitplanes. If you are going to create sprites in Dpaint, use a 32 colour screen

to work in so that you can use the registers 16 and higher. Load your final picture into the Sprite X program (sorry, but the sprite editor won't do it) and reduce the palette to 4 colours before you save.

Music Hassles

The AMOS system can play back music in two formats; its own and the Tracker format. Both have advantages and disadvantages. Firstly, it's better to play a soundtracker module within AMOS because the music is more accurate and does not rely on the CIA timer. However, if you want to play sound effects along with it, you may hear some strange effects. So, in this case it is better to use music in AMOS format for games and so forth.

Another problem with the tracker format is the use of the 'D' command used to break a sound pattern and jump to the next. This was never really standardized between different trackers, and as a result, your own music may jump a half note before the break. This may be corrected by changing the position of the 'D' by one note. Experimentation is the best remedy.

With older versions of AMOS and the Music extension, music converted to the AMOS format was unreliable. Most tunes that were converted would not replay the fourth channel correctly. AMOS would put a half note delay on that channel putting it back a half note behind the other three channels. Imagine a band with the drummer coming in a little late. It sounded something like that.

A later version of the converter remedied that but then there was the problem of timing and the music sounding the same as it did in *Soundtracker*. Those who use a clone of *Soundtracker* will know all about the various effect labels available. Those labels often did not produce the effect they were supposed to once they were imported into AMOS.

The current version of the music extension (1.54) is now the best that's available, and all current versions of AMOS and accompanying extensions will now stay as they are. This is due to the release of AMOS Professional towards the end of the year. So don't expect to see a version of AMOS above 1.34 'cause it ain't gonna happen.

The AMOS playback routines are now almost perfect. The tracker format is much better, but for some applications, the AMOS music format may be the one to choose. An update is available from the club.

AMOS and Assembler?

Assembly code is not an easy thing to incorporate into a BASIC program. That's why the CALL command is such a valuable tool for executing machine code programs and routines. Take the following piece of assembly code:

```
INIT:
    btst #6,$bfe001
```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```
        bne  init
        rts
        end
```

This code simply waits for a left mouse click before exiting. To incorporate this code into AMOS, firstly assemble it to disk and from within AMOS Direct mode, issue the following command:

Pload "MachineCode.exe",[bank No#]

or if you don't know where it is:

Pload fsel$("*"),[bank No#]

Once it's loaded into your chosen bank, type:

Call start(bank No#)

The AMOS will halt until the mouse key is clicked or until your own assembly program exits. This is an excellent area for creating subroutines to sort variables and number crunching instead of writing slow BASIC instructions.

Problems Compiling

Ever get the message "Extension not loaded" when you are compiling a 3D, Tome or any other program using extended commands? Simply change your preference to the "INCLUDE ERROR MESSAGES" option in the compiler; or better still, get a hold of the Compiler 1.34 updater.

News

The big news this month is the release of the Opalvision extension for AMOS. This extension patches into the Opalvision.library which means quality 24-bit graphic manipulation from within AMOS. The text below was sent to me by Robert, Mark and all the guys at Opalvision.

The Opalvision AMOS Extension allows access to the standard Opalvision library functions to perform a wide range of operations. Non-AMOS programmers should note that this library can of course be used by any other language that utilises standard Amiga libraries. The full developers documentation for the OpalVision library can be freely downloaded from the OpalVision support section on the Twister BBS (02) 360 2308, the AMOS section of the Predator BBS (02) 604 6644 or the Australian AMOS club hotline (02 748 4700.

This extension will mean a lot to those who want to create custom multimedia presentations, paint packages (if it's really necessary) or just about anything you can do now with the normal Amiga modes. For more technical details on the extension, contact Opalvision.

A little less on programming this month, but it's important to sit back once in a while and concentrate on the most common problems that people have; experts and beginners alike.

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You Can CanDo

Tutorial No. 7 - A Palette Editor

by Greg Abernethy

I hope everybody got some enjoyment from the paint program tutorial in last month's issue. The program is very basic, but can be improved greatly with a bit of thought. With that in mind, this month's tutorial will be a Palette Editor for the paint program designed in last month's CanDo tutorial.

One problem with the paint program was that there was no way to edit the colours in the palette to suit the user's needs. I will remedy that this month. The Palette Editor will be a SUBDECK that is activated by pressing the "P" key on the keyboard. The Palette Editor will pop up, allowing the user to edit any colour in the palette.

Creating the Window

The Palette Editor window will be a low-resolution window with 32 colours, that has three slider bars, a box displaying the colours of the palette, a box showing the currently selected colour and a USE and CANCEL button. The user can click on the colour to edit, adjust the RED, GREEN and BLUE sliders to get the required colour, and then select the USE button to accept the changes, or CANCEL to return to the previous palette.

Window Details

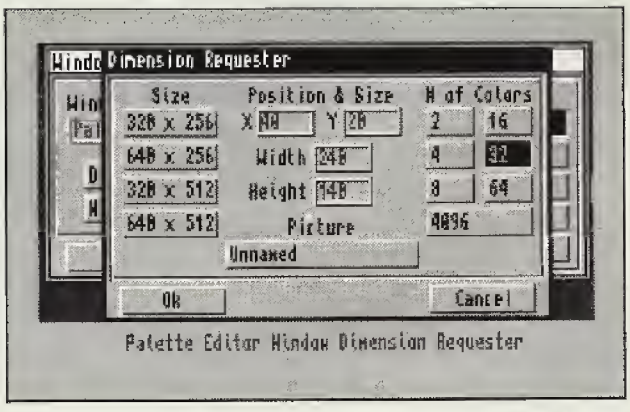
WINDOW NAME	"Palette Editor..."
WINDOW DIMENSIONS	X - 40 Y - 20 Width - 240 Height - 140
	32 Colours
WINDOW OBJECTS	Drag Bar
WINDOW COLOURS	Background 0 Border 3 Text 2
WINDOW OPTIONS	The window has visible borders. Try to open the window on the current screen

Card Details

CARD NAME	"Palette"

AFTERATTACHMENT SCRIPT

```
Let NumCol = ScreenColors   ; Get the number of colours in palette
Let X = 0
Loop
   GetRGB X,Red[X],Green[X],Blue[X]  ; get the RGB values for palette
   Let X = X + 1
Until X = NumCol
Let OldRed = Red            ; The values for each colour are stored
Let OldGreen = Green        ; in these variables in case the user decides
Let OldBlue = Blue          ; to select CANCEL after editing colours
Let Col = 0                 ; The currently selected colour is set to 0
SetPen 1
DrawRectangle 10,12,20,98       ; Draw 3 Rectangles for the RGB sliders
DrawRectangle 40,12,20,98
DrawRectangle 70,12,20,98
Let Y = ((Red[Col] / 16) * 6) + 13   ; work out RED slider position
Do "Slide",11               ; Draw the slider
Let Y = ((Green[Col] / 16) * 6) + 13; work out GREEN slider position
Do "Slide",41               ; Draw the slider
Let Y = ((Blue[Col] / 16) * 6) + 13  ; work out BLUE slider position
Do "Slide",71               ; Draw the slider
SetPen 1
DrawRectangle 109,15,122,102    ; Draw the palette box rectangle
DrawRectangle 10,121,80,14      ; Draw the current colour box
SetPen 0
FloodFill 49,127            ; Fill the box with the current colour
Let x = 1
Let y = 0
Let x1 = 110
Let y1 = 16
Loop
   SetPen y                 ; this loop draws the 32 colour boxes
   AreaRectangle x1,y1,15,25    ; in the palette box. The y value is
```



Palette Editor Window Dimension Requester

```
  Let x = x + 1              ; the current pen colour, and is
  Let y = y + 1              ; incremented by 1. The x value is
  Let x1 = x1 + 15           ; a counter that helps to draw a box
  If x = 9                   ; in the current colour in the correct
  Let x = 1                  ; location. Each colour box is 15 x 25
  Let x1 = 110               ; pixels, and the x1 and y1 values are
  Let y1 = y1 + 25           ; coordinate locations for each box.
  EndIf
Until y = 32
SetPen 1
PrintText "R",15,111         ; Label each slider bar
PrintText "G",45,111
PrintText "B",77,111
```

Explanation

This script may seem complicated, but actually is straightforward. The Red, Green and Blue values of each colour are placed into variables, and then copied into the OldRed, OldGreen and OldBlue variables, so that if the user edits a few colours and then changes his mind, we can change the palette back to what it was before the editor was loaded. Otherwise, the palette would remain the way it was edited when the user exited the editor.

Some rectangles are drawn in the window, and then the colour boxes are drawn. The loop increments the y1 coordinate after each 8th box is drawn across the window. After four rows of boxes are drawn the loop is exited, as I check for the y value being 32, which is one more than the number of colours in the palette. The palette is numbered from 0 to 31, so 32 is actually the 33rd colour which is greater than the number of colours in the palette. After that, I label the slider bars and the window is ready.

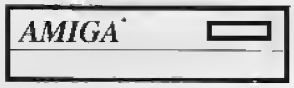
Buttons

The Palette Editor has six buttons. Their details are;

1) BUTTON NAME - "Red"
   ORIGIN Horizontal - 11 Vertical - 13
   SIZE Width - 18 Height - 96
   BORDER - None
   HIGHLIGHT - None

"Click" Script

```
Let Y = 122 - MouseY         ; Work out the slider location
```

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```
Let Red[Col] = ((Y - 13)/6) * 16     ; and current colour of pen and
Do "Slide",11                        ; draw the slider in that location
```

"Drag" Script

```
Let Y = 122 - MouseY  ; as above
Let Red[Col] = ((Y - 13)/6) * 16
Do "Slide",11
```

2) BUTTON NAME - "Green"
ORIGIN Horizontal - 41 Vertical - 13
SIZE Width - 18 Height - 96
BORDER - None
HIGHLIGHT - None

"Click" Script

```
Let Y = 122 - MouseY                 ; Work out the slider location
Let Green[Col] = ((Y - 13)/6) * 16   ; and current colour of pen and
Do "Slide",41                        ; draw the slider in that location
```

"Drag" Script

```
Let Y = 122 - MouseY                 ; as above
Let Green[Col] = ((Y - 13)/6) * 16
Do "Slide",41
```

3) BUTTON NAME - "Blue"
ORIGIN Horizontal - 71 Vertical - 13
SIZE Width - 18 Height - 96
BORDER - None
HIGHLIGHT - None

"Click" Script

```
Let Y = 122 - MouseY                 ; Work out the slider location
Let Blue[Col] = ((Y - 13)/6) * 16    ; and current colour of pen and
Do "Slide",71                        ; draw the slider in that location
```

"Drag" Script

```
Let Y = 122 - MouseY  ; as above
Let Blue[Col] = ((Y - 13)/6) * 16
Do "Slide",71
```


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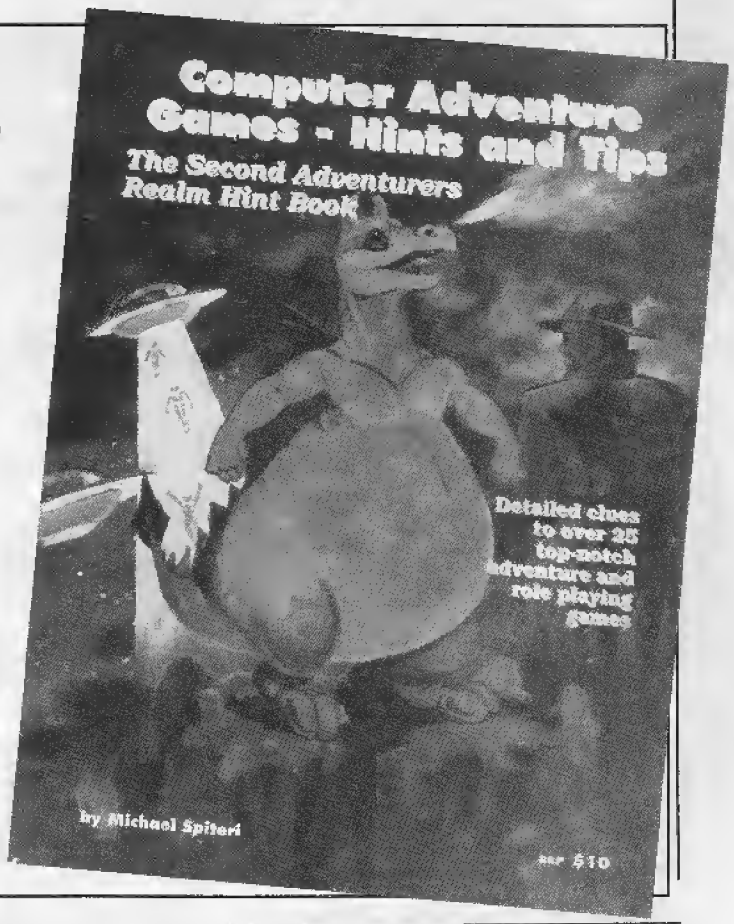

```
4)      BUTTON NAME - "Palette"
        ORIGIN Horizontal - 110        Vertical  - 16
        SIZE   Width     - 120        Height    - 100
        BORDER           - None
        HIGHLIGHT        - None

"Release" Script

Let Col = ColorOfPixel(MouseX,MouseY)   ; Find the colour of the box
Let Y = ((Red[Col] / 16) * 6) + 13       ; clicked on, and then set the
Do "Slide",11                            ; sliders to that position
Let Y = ((Green[Col] / 16) * 6) + 13     ; using the "Slide" routine.
Do "Slide",41
Let Y = ((Blue[Col] / 16) * 6) + 13
Do "Slide",71
SetPen 1
DrawRectangle 10,121,80,14      ; Draw a Rectangle to refresh
SetPen Col                      ; the current colour box and
FloodFill 49,127                ; then fill it with the new colour

5)      BUTTON NAME - "Use"
        ORIGIN Horizontal - 97         Vertical  - 125
        TEXT           - " Use "   ; Put spaces in to make it neater
        BORDER         - DOUBLEBEVEL
        HIGHLIGHT      - COMPLEMENT

"Release" Script

Quit    ; If the user edits the colours and then selects "USE" the
        ; palette colours have already been changed, so all we do is Quit.

6)      BUTTON NAME - "Cancel"
        ORIGIN Horizontal - 156        Vertical  - 125
        TEXT   - " Cancel "     ; Put spaces in to make it neater
    BORDER         - DOUBLEBEVEL
    HIGHLIGHT      - COMPLEMENT

"Release" Script
Let X = 0
Loop
    SetRGB X,OldRed[X],OldGreen[X],OldBlue[X]   ; Do a loop to reset
    Let X = X + 1                   ; each colour back to its
    Until X = NumCol                ; original values
    Quit                            ; and then quit.
```


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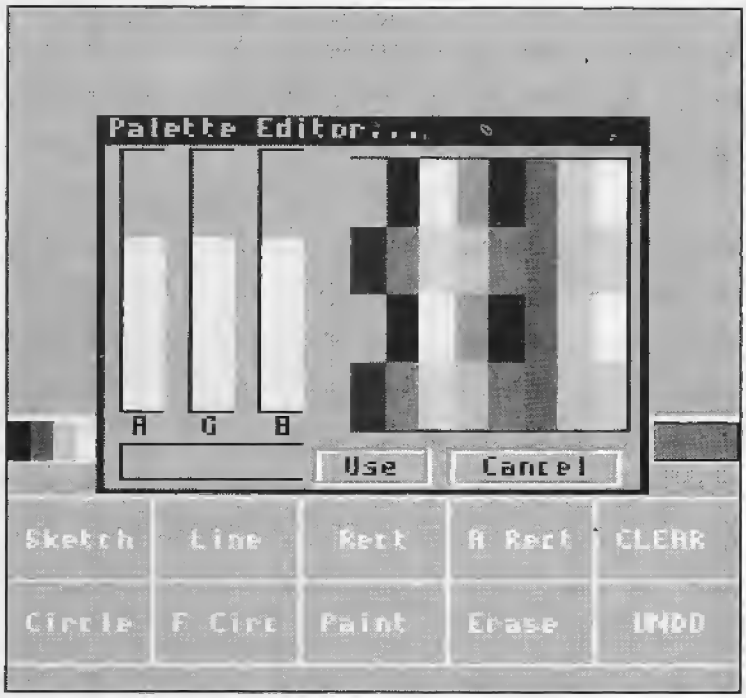

Explanation of BUTTONS and ROUTINE

When the user selects a colour by clicking on the palette box, the slider bars are adjusted to the values of the new colour and the current colour box is filled with the new colour. The user can then adjust the location of the RED, GREEN or BLUE sliders by clicking on the slider box or sliding each value up or down. Locations are relayed from each button to the "Slide" routine which displays the appropriate information.

When you have completed the deck, save it in the same location as the paint program deck and then test it to see if the colours change when the sliders are moved. If the program does not run correctly check your scripts again.

Adding to the Main Program

Load the paint program deck and go to the BEFOREATTACHMENT script. Enter the following line, inserting the location of your palette editor deck.

```
LoadSubDeck "[location and name of Deck]","Palette"
e.g. LoadSubDeck "df0:Paint/PaletteDeck","Palette"
```

This will load the subdeck into memory in a buffer called "Palette" that we can call at any time to display the Palette Editor.

Routine

There is one routine, the "Slide" routine, which changes the position of the slider bars and adjusts the RED, GREEN or BLUE values of the currently selected colour. Make the routine a LOCAL routine and name the Routine "Slide".

```
"Slide" Routine Script
SetPen 0                                    ; Draw the slider bar in
AreaRectangle ARG1,13,18,109 - Y            ; the new location and
SetPen 2                                    ; adjust the colour of
AreaRectangle ARG1,218 - (Y + 96),18,Y - 13 ; the current colour.
SetRGB Col,Red[Col],Green[Col],Blue[Col]
```

Creating a Key Input Object

It is necessary to create a Key Input Object to be able to display the Palette Editor. Deluxe Paint IV uses the"P" key to display its palette editor, so let's do the same. On CanDo's Main Panel click on the Key Input Object Editor (The "A" keyboard key button).

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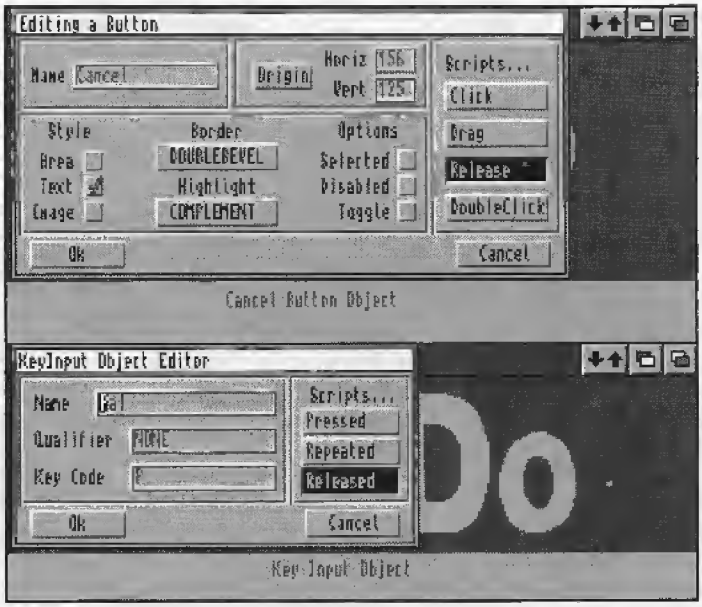
Key Input Object Details

```
OBJECT NAME  "Pal"     ; Give the Object a name
QUALIFIERS   NONE      ; No qualifier keys required
KEY CODE     P         ; Key Code set to "P" so when "P"
                       ; is pressed the script is executed
```

Key Input Object Script

```
OpenRequester "Palette"
```

The Key Input Object will perform this script each time the "P" key is pressed and then released. The Palette Editor will pop up and the user can edit the colour palette of the paint program.



Final Notes

Save the paint program deck and then test the program. Remember to have CanDo perform the BEFOREATTACHMENT script by clicking on the LEFT arrow on the Main Panel. This will load the subdeck into memory so it is ready for use. Press "P" and the Palette Editor should pop up. The paint program has just become a bit more flexible by adding the Palette Editor.

Text Editor Ooops!

I received letters from Terry Parker of Ballina, and Mark Dawson of Terrey Hills, who informed me I had forgotten to include the name of the DOCUMENT OBJECT in the Text Editor tutorial, causing them much grief and head scratching. Sorry to all the CanDoers who suffered as well, and the name of the DOCUMENT OBJECT is "TextEditor". I'll try not to let that happen again.

I also forgot to include any means of exiting from the paint program if it was run independently of CanDo. By adding a MENU OPTION or KEYBOARD OBJECT, this problem can be averted.

Terry and Mark also thanked me for the articles and gave me some ideas for future tutorials. Thanks guys, and let's see some of the other CanDoers putting forward ideas of things they would like to see or projects they have completed. Send your correspondence to: Greg Abernethy, 78 Goolagong Street, DAPTO. 2530 and I will respond to your suggestions for projects.

Next month the tutorial will be a simple database for keeping track of your CD and Record collection, with some SEARCH and SORT routines being added. The database will allow you to enter details of your CD's and Records and then get reports on various aspects of the database.

So till next month, have fun with the Palette Editor. ●

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Hot PD!

Daniel Rutter

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Applications from libraries about registration should be addressed to either Prime Artifax or Megadisc - see their advertisements in this issue for the addresses. Sounds good to me! Anyhow, on with the show.

BaudBandit

This is a simple drop-in replacement for the serial. device included with AmigaDOS, either 1.x or 2.0. The problem with the existing serial.device is that it supports a great deal more options than the average user will ever need - certainly more than I use in my communications efforts. The only problem you're likely to have is if you try to run your comms program without the modem turned on - for phonebook editing, say. Nothing will happen until you flick the modem on and off, since BaudBandit.device wants a DTR signal before it'll work.

This also stuffs up null modem transfers if you use the standard 3 wire null modem cable - connect the DTR and CTS lines as well and you're in business. Baudbandit.device is the only way to get really fast (19200bps and beyond) null modem or other connections happening on 68000 based machines.

It's ShareWare, and costs 20 Deutschmarks to register.

XPR-Zmodem Update

While we're on the subject of comms, the xprzmodem.library, which is used by many comms programs to effect ZModem protocol data transfer (the standard) has been updated to 2.52. This latest version simply contains a recompiled version of the 68020 library - nothing much has been added since 2.50, 2.51 just changed a timeout value - but now you. know, anyway). Oddly, the Version string in the library is still set to v1.0 - a slight oversight, since all the documentation makes plain that this is the new and improved version!

Req.library Update

The req.library is a shared library which gives programmers access to a neat, functional and uniform file requester. The latest version as I write this is 2.7. I don't currently know of any programs which require this version of the library, but it doesn't hurt to be up to date.

BootX 5.00

This, latest, upgrade to arguably the most powerful virus eliminator available for the Amiga will only run under Workbench 2 (upgrade - you won't regret it). Changes have been made to the interface which make BootX even easier to use than before, but it does require the reqtools.library v38 or higher - at the time of writing I only have the Workbench 1.3 version of this but it seems to work fine. The BootX Recog file has reached V1.68; this magnificent program really is all the virus protection any Amiga user could ever need.

Fish Aquarium to 690

Data files for the imperfect yet widely used Fish Aquarium database program are now available up to disk 690; this set of data files came out only slightly after the disks themselves, a welcome change from previous delays. The current version also sports modifications to the text on the database's buttons - removing the Most Current button, since whoever's been compiling the data files got a bit sloppy on setting that flag.

Using this set of data files on a 1Mb or smaller floppy based machine is as good as impossible; you can do it on an expanded machine with at least two megabytes and no hard disk, but a hard disk is the way to go for easy access.

Sound Vision Demo

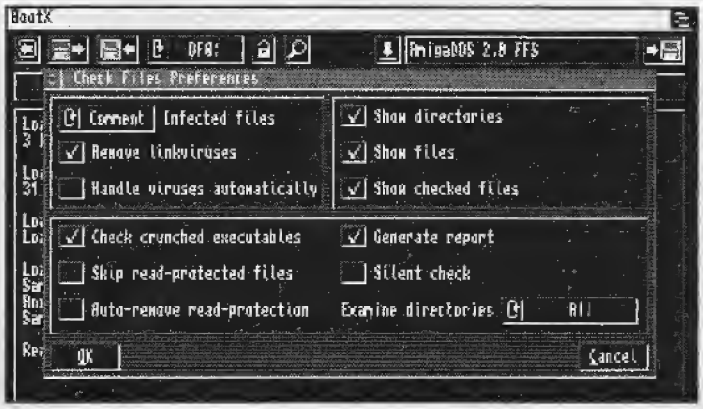
This demo from the Reflect group got four stars on the D. Rutter Gobsmackometer - one star is awarded for every time the viewer says, calmly and reasonably, "now THAT's not possible." The demo opens with a real-time text morph which must be seen to be believed, and moves on through the credits - get 'em in early so the watchers don't reboot. Highlights include a blisteringly fast cube vector with different vectors and other stuff on each face, an amazingly smooth bouncing globe, the best flythrough vector town I've ever seen (complete with orbiting lightsource casting shadows!), and a similarly turbocharged fractal landscape generator.

Like all good recent demos, it runs as fast on 68000 machines as 68030 - there are slight glitches on 030 but it doesn't crash - and it works perfectly under Workbench 1.x or 2. You MUST, not should, might or ought to, get this demo - run, don't walk, to your nearest phone and

order it from your local PD library!

AltMenu

MicroSoft *Windows* is a pig of an operating system. The current version is an obvious piggyback on MS-DOS, and the current unoptimised beta version of *Windows NT* takes, I've heard, something like 200 megabytes just to install! But there's one feature in *Windows* that Amiga users might occasionally need - the ability to control menus with the keyboard. You won't use it often, but it's nice to know it's there, and AltMenu lets you effortlessly skip to the next item in menu beginning with a certain letter, which is a plus for programs without proper keyboard shortcuts; it avoids the time-wasting mouse shuffle. AltMenu is a commodity, and so requires Workbench 2 (another heavy hint to those who haven't upgraded).



Translators

One of the two things I've always said any computer really needs in order to be taken seriously is a Jive translator - a program which converts any input text into mildly profane jivetalk. Until recently, I was concerned at not being able to find an Amiga port of this brilliant program, but just the other day I downloaded an archive containing one, not to mention two other translators, Kraut and ValSpeak.

Kraut turns whatever you feed into it to something that sounds like a cheap B-movie KampfGruppenFuhrer, and ValSpeak converts input into genuine Orange County freak-speak. Want an example? Okay, let's take a brief excerpt from a stultifyingly tedious article I wrote some time ago about text editors, which reads as follows:

"For text processing, though, AZ leaves a bit to be desired. For a start, there isn't any word wrap. You can set long lines, but you have to hit return every time for a new one. Also, if you should want to join two lines by placing

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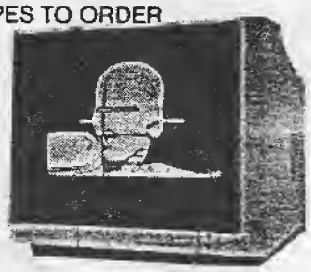

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the cursor at the beginning of the second and hitting backspace, you'll annihilate any text which, after the joining, extends past the right margin. Not nice."

Jive converts this to:

"Fo' text processin', dough, AZ leaves some bit t'be desired. Fo' some start, dere isn't any wo'd wrap. You's kin set long lines, but ya' gots'ta hit return every time fo' some new one. What it is, Mama! Also, if ya' should wanna join two lines by placin' de curso' at da damn beginnin' uh de second and hittin' backspace, ya'll annihilate any text which, afta' de joinin', 'estends past da damn right margin. 'S coo', bro. Not supa' fine."

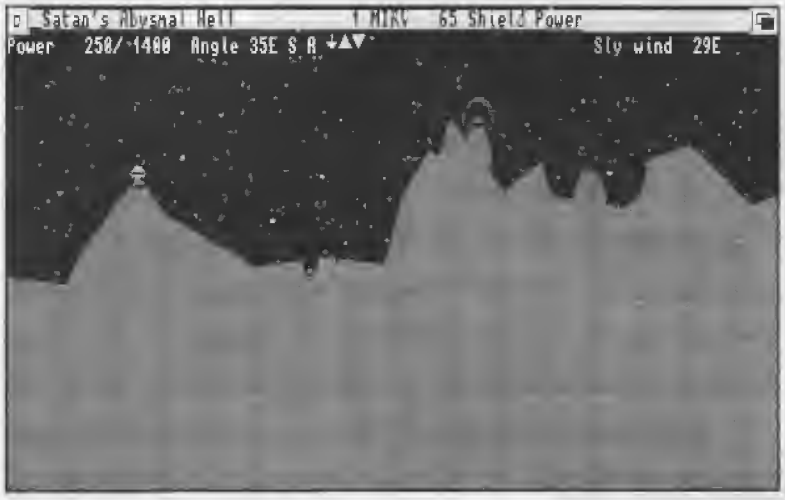
And Kraut makes it:

"For text processingkt, dough, AZ leafes a bit to be desired. For a start, dere isn't any vord vrap. You kan set long lines, but you hafe to hit r-r-return efery time for a new one. Also, if you schould vant to join two lines by placingkt ze cursor at ze beginningkt uff de second undt hittingkt backspace, you'll annihilate any text vhich, after ze joiningkt, extends past ze right margin. Not nice."

In ValSpeak:

"For text processin', like, though, mostly, AZ blows a bit to be desired. For a start, like, there isn't any word wrap. You can set long lines, fer shure, but you have to hit return every time for a new one. Also, man, if you should want to join two lines by placin' thuh cursor at thuh beginnin' of thuh second and hittin' backspace, fer shure, you'll annihilate any text which, like, wow, after thuh joinin', fer shure, extends past thuh right margin. Not class."

On the downside, you're going to have to use the CLI to run any of the translators - you can run them without arguments and just type for translation when you hit return. Or you can type the translator's name with a less than sign followed by the name of a file to translate, with an optional greater than followed by a destination file if you'd like the output to go somewhere other than the CLI window.



You are almost certainly wondering (heck, maybe you're not but it's my column so nyaah) what the SECOND thing I feel any real computer must have is - it's an *Artillery* clone. The original *Artillery*, as seen on every 8-bit computer that ever there was, was a simple mathematical game in which you and a friend took command of two tiny tanks on a randomly generated two dimensional landscape, selected your barrel angle and amount of gunpowder, and took turns to rain high explosive annihilation on the other guy.

Now, the Amiga has for a while had *Tanx*, which is indubitably the prettiest *Artillery* clone ever, but it's lacked something - fusion weapons, mainly.

The IBM world has a program called *Scorched Earth*, which includes many wonderful instruments of mayhem like napalm, Multiple Independently Targetted Re-Entry Vehicles, and some very expensive weapons like the mighty Funky Bomb, which splits into three, each of which blasts a big hole on impact and fires out two more equally powerful projectiles at stupendous velocity. This wonderfully anarchic program has now been somewhat untidily ported to the Amiga, with some interesting modifications and additions - for example the high level weapon simply called Damn Yeah!, which must be seen to be believed.

The port is badly done. On a 68000 machine it plods, badly. It takes a LONG time to load even from hard disk. Its interface is okay but not great. It has no instructions. And it languishes under the rather pretentious name of *Satan's Abysmal Hell*. But all this will matter naught to dedicated *Artillery* fans such as myself - get it, and remember - a hill is just a crater waiting to happen!

New Music Tracks

Prime Artifax PD has extended its series of Tracks disks to 15. The latest five contain (on #11) *Deee Lited* (with some great samples from Neil of the Young Ones), *Exp.20*, *Getdown* (with completely gratuitous Blackadder samples) and *Maybe (II)*.

On #12 you'll find *Abyss*, *Coma* (the classic elderly house module), *Dance Mix* (another classic), *dd3-TitleMusic* and *Furzogue* (a Vogue remix).

#13 has *Cooperation*, *dd3-hiscore*, *Extra Vibes*, *Helmet For Sale*, *PARTY* (catchy!); *Px.bladswede* remix and *Px.Thesmophoria*.

On #14 are *Eclipse*, *Paranoimia* (the classic from the first NewTek demo!) and *RiseUp*.

#15 has *Fantasy*, *Live&direct* (one for the Max Headroom fans) and *Mystery*, which is particularly impressive.

All the disks contain *IntuiTracker* for playback, as usual, or of course you can load the modules into your favourite *Tracker* program.

Crunched File Examiner and WhatIs

These two programs solve the perennial problem of figuring out what kind of file you're dealing with, without going through the rigmarole of failed loads, fruitless conversion attempts and all the rest of it.

WhatIs has a huge database of known formats, while CFX has an even bigger but more specialised database of crunched file formats, including all those an-

tique crunchers nobody but hackers used.

WhatIs also has one enormously helpful feature - it will swiftly and easily tell you what devices, libraries and fonts a program needs to run, ending forever the annoyance of programs that flop without telling you why.

PowerSnap V2.0a

This program, another example of the endless ingenuity of Nico Francois (*PowerPacker*, AMOS and many, many lesser achievements), allows you to mark text with the mouse almost anywhere and paste it almost anywhere else. But, I hear you cry, doesn't Workbench 2 (which incidentally is required to run *PowerSnap* these days) already provide these features?

Well, kind of. The standard WB2 Clip utility (invoked by ConClip in your Startup-Sequence) allows you to copy and paste text, but only to and from CON windows - like the CLI and the standard Commodore Ed program. Hence many of the most useful Snap applications are impossible - for example, grabbing an involved and hard to remember filename from your comms program's screen and dropping it straight into the program at the download prompt.

You also can't insert text into anything other than a CON window, so, for example, pasting from the copy buffer into *CygnusEdPro*, my editor of choice, is a no-no. *PowerSnap* will copy by letter, word or line, with cope well with spaces and differing type sizes, and generally does a much much better job. On top of that, it's a commodity and can be controlled easily by the Commodity Exchange and kicked off in your WBStartup drawer!

Everything mentioned in this column (except for the *Aquarium* data files, which should be available on a dedicated disk from all good PD libraries, and of course the *Reflect* demo and new Tracks disks) I've compiled onto a disk available from Prime Artifax PD, called HotPD2.

To fit all the stuff on I've had to archive it all, but every item's in an individual archive so people without hard drives won't have to wrestle with LhA (also included) and its confusing command structure. I've also decided to forego icons (time to learn your CLI or get DOS 2, folks) since they don't help at all with archives, and I've trimmed off all the source files, makefiles and other ephemera only of interest to programmers - if I'd left it all in there would've been 1.2 megabytes of stuff even AFTER archiving!

Dudd Dirwork Version

Before I go, I'd just like to warn any users of Chris Hames' excellent DirWork directory utility that some brain-dead wally has produced a fake v1.71 of the utility - this may well be a trojan horse program, and certainly is no improvement on the current version (1.62 at last count). Chris will now skip over the 1.71 version in his development program to avoid confusion. ●

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The C64 Column
by Owen James

by Owen James

Contacts

C64 users wanting more support can join "C64/128 Friendz & Contax". They're a world-wide club for all Plus4, C16, Vic 20, C64 and 128 users and produce a regular magazine for all ages. They have a library of up to date public domain software and gaming hints and tips, plus offer several competitions for its members. "C64 Friendz & Contax" may be contacted care of Steve Hedges, 11 Dunsford St, SA 5608.

Biggest C64 BBS

Talisman BBS, probably Australia's largest C64/128 support BBS, has offered even more support for its members by sending out leaflets on how to get the most out of the system. Details of menu options, commands and transfer hints are provided to help you with getting to know the system. Included is also a disk providing archive dissolving and terminal programs.

Talisman is operated using a C64 running *Image* colour BBS software, a Lt Kernal hard drive and a Netcomm 1234sa modem. A world-wide C64 message base is also available for members to participate in, and Talisman boasts over 100 megs of Commodore 64 and 128 files to download.

Well done to Glenn Thomson and the rest of the gang for providing a top system. Talisman BBS may be reached on (059) 444 061 for 23 hours a day, seven days a week.

On the subject of Communications, Glenn Thomson, sysop of Talisman, will be writing a column on C64/128 Communications for Commodore Network 'Real Soon Now'. If you'd like to know more about using your modem, catch Glenn's column sometime over the coming months. For more information on Commodore Network, write to 9 Wadeson St, Cobram Vic 3644.

If you have a news item to contribute, or have a group or club you'd like to see mentioned here, you can contact me care of The ACAR, PO Box 288, Gladesville NSW 2111. Alternatively, you can Netmail me at 3:713/810.2. Let me know all relevant details, and provide me with a return address and telephone number where possible.

A600 - an upgrade path?

There's been a lot of talk lately about the new Amiga 600 and whether it is indeed the ideal upgrade path for C64 users. I'm not going to review the A600 here, but this month I thought we'd take a look at it from a C64er's perspective.

Firstly, to clear up a few misconceptions: the A600 is not the hotly rumoured C65, it does not run C64 software, nor is it faster and more powerful than an A500, contrary to some recent advertisements from retail stores.

I first had the opportunity to set eyes on the unit at the July World Of Commodore show in Darling Harbour. My initial impression was "Cute".

If you look at it you'll notice many cosmetic similarities to the current model C64. Like the C64, it is small, low profile, and has no numeric keypad. Make no mistake - this is not a machine that would look comfortable in an office environment. This one is definitely targetted at the home market. Lift the lid, however, and you may be surprised to see what appears to be a hybrid A500 motherboard, or something much like it.

The A600 should run all current AmigaDOS 2.0 compatible software, but interestingly may have trouble with some games, especially the earlier ones. As I mentioned previously, it is an Amiga and so cannot run C64 software directly, though it should have little trouble handling the excellent public domain program *The A64 Package* which should give it some degree of C64 compatibility.

Buying an Amiga and running C64 software on it, however, does defeat the purpose of an upgrade and I certainly wouldn't count on your entire collection of C64 software to run via this method.

So, what are the advantages of trading in your C64 for the A600? Well, there can be many depending on what you are currently using your C64 for. Obviously people that use their C64 primarily as a games unit, and who may have noticed the amount of new releases to be waning of late, can benefit from the plethora of new high-quality games currently being churned out of mostly European game houses.

There is a noticeable difference in the quality of games available, simply because the Amiga has more resources to play with - stereo sound, higher resolution, more colours and smoother animation.

But what if games aren't your cup of tea? If your main use of the C64 is word processing or maintaining simple

databases, the advantages aren't as clear. You benefit from an 80 column screen and more powerful word processing packages, but you need to ask yourself if these advantages are worth the $799 currently being advertised for the A600 with 30 meg hard drive. Then of course you may need a new printer as well.

You should also be aware that the A600 cannot be expanded in the same way that the A500 can be. Sure, you can add your external drives, modems and printers, but it's not designed for accelerators and huge amounts of memory. If you're thinking of jumping up to an A500 instead, perhaps you should also reconsider. Word from around the traps is that the A500 will be dropped in the very near future in favour of the less expandable 600. I wouldn't like to speculate on this too much at the moment, however.

If you're considering a step up to the A600, I'd be inclined to wait a little while. Prices will definitely fall over the next twelve months. CDTV units have already dropped to just a little over half the price they were originally at discount retailers. There's also whispers of a new 'Power Up!' promotion being launched by Commodore to get C64 owners to upgrade for very reasonable prices. There's no official word, and we may not even see it in Australia (the other recent Power Up! promotions never made it out here) but don't be surprised if it does.

Mail

C64 Space &Adventure Construction

George Axam, of Wynnum Qld, writes: "Dear Owen, Surely you aren't taking Andrew Farrell's space limitation for the C64 lying down. There hasn't been any reader surveys recently, so how did he determine that the readership demand is diminishing rapidly? I would be willing to pay an extra 50 cents per copy if magazine size was a genuine concern.

"For Matthew Maher, who's letter appeared in the August ACAR, I can get Adventure Construction from the US if he sent me $30, or he could order directly on 0011 1 206 1393. The same company also sells 300 baud modems (used) for $US7.50, 1200 baud for $US60.00, 2400 baud for $US80.00 and my favourite adventure *Mindshadow* for $US8.00.

"I told people that I could send out a list of products for $5.00. I will still honour this offer, though the envelope and postage alone is $2.20. This means that I can only photocopy about 20 pages. If anyone sent in $10.00 they would receive a complete list. All orders of course get their own original catalogue. My address is 76 Adam Street, Wynnum 4178.

"I understand if there is no room to print my letter, though I think you should demand more than one measly page."

OJ: Well George, there was (just) room to print your letter. As for taking it lying down, well, short of strapping a rather large explosive to Andrew's car, there's not a lot I can do about it. As I heard it there were some complaints from Amiga readers that they shouldn't be paying for C64 coverage (We know where you live!), so they obviously yelled the loudest.

No GEOS Column!

Andrew McCallum, of Ballarat VIC, writes: "Dear Owen, I read with some regret that ACAR are cutting back on their 64 content, this appearing in the August Editorial when the contents of that issue for the C64 was, in my opinion, the best for months! What about the GEOS column? Is it now defunct? Please pass on my displeasure to the editor. I, like many 64'ers will stop purchasing ACAR as a result. $3.50 is a lot for one page!"

OJ: Yes, the GEOS column is now dead in ACAR. Word just at hand is, however, that Artie will be taking over geoPAGE in Commodore Network. So for all you GEOS users out there, you may be able to catch Artie there over coming months.

Commodore Network is the Answer?

Steve Addison, of Naracoorte SA, writes: "Dear Owen, This letter is to express my disappointment in ACAR for reducing its C64 content down to a one page column. I really used to enjoy reading the magazine. As I could justify spending the $3.50 on it, with it having your "C64 Column" and Artie's "GEOS Column", both of which I found very informative and enjoyable. The whole magazine I found useful as living in the country the adverts helped me get quite a lot of my software.

"I suppose the answer would be to get an Amiga, but as my C64 does all I want, I can't see the sense nor could I afford it, entailing as it would not only the hardware but also the software.

"I hope all C64 users support Warren Naismith and his "Commodore Network". I am definitely taking out a subscription, as it will hopefully replace ACAR for me."

OJ: Commodore Network is certainly coming along in leaps and bounds at the moment. Already Warren is looking at increasing the number of pages. To those that have been enquiring, yes, I will be contributing some monthly musings to it later in the year, though it won't be a reprinted C64 Column - sorry. I look forward to seeing many of you in Commodore Network in the near future.

Well, that just about wraps up this edition of The C64 Column. As usual, I'd love to hear from you. I can be contacted care of The ACAR, PO Box 288, Gladesville NSW 2111, or you can Netmail me at 3:713/810.2. If writing a letter, please include a return address and a fax number where possible. See you all (some of you?) back here next month. ●

Island by Mail

We have been informed by a reader that Island by Mail's new address is:

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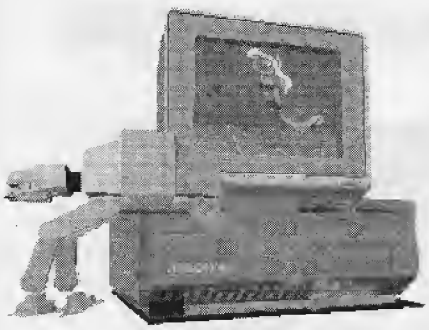

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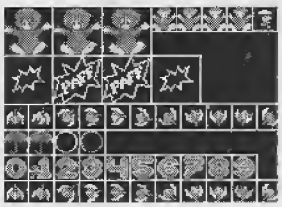


Lemmingoids!

Take an arcade classix like Asteroids, change the graphics, add new sound effects and you have a new game. Shoot the Lemmings! The best part is, you can also do the same and make your own custom Asteroids clone!

NEW

OVER 720 Fish Disks! Aquarium Database now available - HD installable.

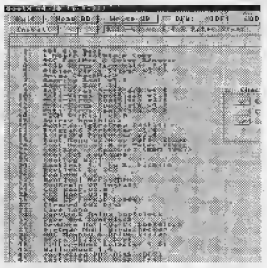
GROWTH!

A multi-level Break-Out style shoot 'em up. This one requires quick relexes and good co-ordination. Now you can move your man around the edge of the entire screen - challenging play - good music and FX too.

NEW

ANTI-VIRUS PAK
KILLS IRAK VIRUS!

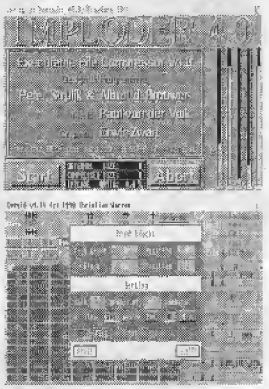
The best virus protection program on the market. Fresh from Europe and updated regularly, BOOTX will cover you for all types of Viruses including the latest file and library based strains. A Quick-Start guide to Viruses as well as additional in-depth information is also included in on-disk printable text files.



BOOTX 4.5 - European origin for protection from all the latest.

AmigaDOS Helpers and Utilities

TWO DISKS: DirWork, directory utility; Imploder4.0, file compressor; LHA1.22, archiver; LibList1.20, library lister; PP, use PowerPacked data files; SuperDuper, SysInfo2.64, system stats; TrackDOS, DOS/RAM/ disk track interchange; Amiga Resource Project (ARP), makes 1.x DOS commands smaller & more powerful; CShell, Shell replacement; DekSid, disk/file sector editor; FixDisk, salvage damaged floppy/hard disks; and FlashDisk, floppy optimiser.



WB 2.x Enhancer

Icons; preference presets for backgrounds and pointers; a NAG program for remembering important times and dates; and a commodity which adds many wanted functions such as screen and pointer blanking, hot keys, expanding windows, audible key clicks, window activation, mouse accelerator and more.

NEW

PRINTER DRIVERS

Driver programs for just about every printer ever made, including recent models. If you're having trouble finding a driver for your Datsubishi Grapefruit 300XR, it's here! Just copy the relevant driver into your DEVS:Printers directory and select it from Preferences!

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A wordprocessor style editor for creating simple forms which you can print out on a dot matrix printer. Easy to use. Written in AMOS.

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Complete instructions to get you up and building your own Amiga 500 SCSI interface. Parts available in kit form locally.

Amiga FONTS

Need fonts for a wordprocessor, desktop video, Deluxe Paint? Want to make your own fonts? This disk contains plenty of useful styles and a complete font editor.

- OVER 50 FONTS!
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NEW

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As a small way of saying thanks for using our services, this month only, every order will include a FREE guide to Getting the Most Out of Your Amiga, by Andrew Farrell.

CARTOONS

1MB

Cartoon Anims-1 : Batman, Shuttlecock and Stealthy -
Cartoon Anims-2 : Amy-Vs-Walker
Cartoon Anims-3 : Juggette, Juggette-2 and Juggler-2 - Comedy animation continuing theme of original Juggler demo.
Cartoon Anims-4 : Stealthy Manuever - (MovieSetter)
Swiss Army F-16 - (MovieSetter)

2MB

Big Cartoon Anims-1
Anti-Lemmings Demo
Big Cartoon Anims-2
Coyote 2, VTOL Contest
Big Cartoon Anims-3
POGO

HOT PD GAMES!

Hot Games - 1: Arcade AirAce, Missile Command, Car Race, Downhill.
Hot Games - 2: Strategy Blackjack, Metro, China Challenge, Conquest, Klondike.
Hot Games - 3: Arcade Hate, MegaBall.
Hot Games - 4: Classics Galaxians, Pacman, Space Invaders and Asteriods.
Hot Games - 5: Mind Games Imperium, Mech Fight.
Hot Games - 6: Strategy Skyfight, Spacewar
Hot Games - 7: Arcade Amiga Tanx, Rollerpede, Cave Runner, X-Fire

MUSIC TRACKS PAK

Our own tracks disks 1-10, buy the lot and we will throw in SOUND TOOLS for FREE! Great music ready to play

WB 2.x GAMES PACK - 2 Disks

Two disks - NO JOYSTICK Required - All run from Workbench 2.x.
These disks have been compiled from our own Hot Games collection. They represent the best strategy and arcade style games we could find which will run on a 2.x Amiga with ECS. That means these games will run on an A3000 or A600.

Titles include :
Missile Command, Adventure, Sub Attack, Tettrix, Maths Adventure, Mine Clearer, The Gallows, Ashido and many more. (20 games in all)

MORE TRACKS To PLAY NOW AVAIL. Disks 11-15 have been compiled - more of the best from the rest. A great source of music.

For the Home Office

Analyticalc - Power spread-sheet package
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Phil Campbell's Entertainment

All the latest news and views from the world of entertainment

California Games II out now

Hang-gliding, jetskiing, snow-boarding, skateboarding and boogie boarding are all included in this latest whacky sports sim from the reformed Epyx. The Amiga version should be in the shops by the time you read this, retailing at $69.95 from Mindscape.

Graham Gooch's World Class Cricket

It's cricket season, and what better way to celebrate than booting up with *Graham Gooch's World Class Cricket.* At $69.95, this is from all accounts the first cricket sim to really get it right!

Racing Season

Mindscape are going car crazy this month, with three new racing releases due to hit the shelves at any moment. First comes *Crazy Cars 3*, then *Lotus Turbo 3* - which should be huge - and then in late October, *Nigel Mansell's World Championship Grand Prix.* We'll be keeping you posted on the best value games for your driving dollar.

Robosport from Maxis

Just in from the creators of *Sim-City* is a nifty looking game called *Robosport*. Billed as the "thinking man's shoot-em-up", the game lets you control teams of robots competing in five different sports - survival, treasure hunt, capture the flag, hostage and baseball. Up to four players can join in the fun with Commodore's new TCP/IP Network board; or you can play head to head with a friend via modem or serial link. Stay tuned for a full review next month.

Need Help? Take a Hint Disk!

The second official ACAR Entertainment Hints and Tips Disk is crammed so full of hints, tips, and full game solutions that it'll hardly fit into the drive. In fact, some of the little blighters keep trying to jump out through the little slidy silver bit on the disk. Need a full solution for *Indiana Jones and the last Crusade*, with maps? Or a full set of clues for *Leisure Suit Larry 1* and *3*? Want some help with *The Secret of Monkey Island*? Or some training for *4D Sports Boxing*? It's all here - all the tips printed in the last year of ACAR, plus a whole lot more besides! Add it to Disk 1 to make the most comprehensive collection of tips in Australia.

How do you get a copy? Simply send a blank Amiga disk, a cheque or postal order for $5.00 and a stamped, self addressed envelope to Phil Campbell, PO Box 23 Maclean NSW 2463. Please specify whether you're ordering Disk 1, which is still available, or Disk 2.

Copy Cats Competition Results

Thanks to all those who mailed in confidential details of their software collections for our August survey. I was surprised at the number of people who took the opportunity to confess to their pirating ways! Ben, from Qld, is one example - "Nowadays, I'm trying to give up copying games (it's not easy, you know) and buy more originals to support the Amiga software developers, which I fear are diminishing." Good move, Ben - if more people shared your attitude the Amiga marketplace would be in much better health.

The survey results are fascinating. Responses ranged from collections of 598 original games and 104 copies through to 117 originals and no copies down to a more humble four originals and no copies. Average figures are fascinating! From the responses to our survey, the average Australian software collection includes 61.5 original games and 42.5 illegal copies! Whether that means software houses have missed out on 42% of their sales is difficult to say - I guess most people would say they wouldn't have bothered buying many of the games they've trialed as copies.

The lucky winners of Mindscape's Bitmap Brothers Compilation, featuring *Xenon, Cadaver* and *Speedball 2*, are as follows:

1. Mark Locandro, of Ballarat Vic
2. I. G. Munro, of Hackham West, SA
3. Jenny Argyrous, Bossley Park NSW.

Mindscape California Games II Competition

This month Mindscape are giving away four copies of the amazing *California Games II* mentioned in despatches above. If it's as good as the popular *CalGames I*, it's sure to be a runaway success. And now, you can win your very own free copy!

Here's what you have to do. First of all, list the five sports featured in *California Games II*. Then invent a series of sports that you'd like to see in the NEXT edition *California Games*. Make them as weird as you like - four prizes will be awarded to the most original and amusing entries, and we'll forward your suggestions to Mindscape to inspire the programmers of *California Games III!*

Write your ideas on the back of an envelope, together with your name and address, and mail it to:

Mindscape October Competition, c/o Phil Campbell, PO BOX 23, Maclean NSW 2463.

Entertainment Letters

Entertainment Mailbox
PO Box 23, Maclean NSW 2463

Looking for help in a game? Frustrated by the price of entertainment software? Need to let off some steam? Then send your entertainment letters.

Commodore responds to Questor Slights

Dear Phil, I refer to your news item on page 64 of the August issue of ACAR, in which Tim Allison of Questor is quoted as saying that "many Amiga users are no longer using their computers."

Readers may not be aware that the company Mr Allison represents, Questor, is owned by Sega. Small wonder, then, that Mr Allison would make such a comment!

I would suggest that Amiga owners are not being served adequately in Australia by Ozisoft/Questor when there is such a conflict of interest. Amiga users who buy software (in good faith) from the company are supporting the Sega games machine!

I would point out that in Europe, and more specifically Germany and the UK, distributors are experiencing large sales of Amiga software, because they are doing it right.

Mr Allison's company has been invited to display at the last two World of Commodore Shows, but has decided not to do so. (Incidentally, had Mr Allison displayed at the Show he would have discovered just how much garbage the statement that "Amiga owners are no longer using their machines" really is!)

With this level of support from Questor/Ozisoft it's small wonder that sales of Questor and Ozisoft products for the Amiga are low - or would I be so naive myself as to believe that is exactly what Sega really want?

In Australia, I believe that just about everything in business is "fair game". But the emphasis is on the word "fair". When Sega owns one of the largest software distributors in Australia, I believe most Australians would agree that it's great for Sega, but hardly fair for other platforms such as the Amiga.

Of course, Mr Allison has stated that there is no involvement of Sega in Questor or Ozisoft. Tim, at Commodore we don't believe you!

Pat Byrne
Managing Director
Commodore Australia

Ed: Point taken, Pat. We all know that Questor and Ozisoft are firmly married to the Sega games console line. But the point of running news items like the one you refer to in August ACAR is to stir up Amiga users to bigger and better things. None of us - from you at the top, to users at the end of the line - can afford to be complacent about the Amiga's future. Here at *Australian Commodore and Amiga Review*, we're genuine Amiga fans - and that means we don't want people "sticking their Amigas in the cupboard".

Nor do we want our readers crippling the industry by illegally copying software. Whether Tim Allison is point-scoring or not, Sega and Nintendo are chewing out the bottom end of the market. And it's only dedicated Amiga fans who are going to stop them.

Point Scoring

Dear Phil, Firstly, I have to make a few points about some of the reviews in the July issue.

1. *Titus the Fox* - Why was no mention of the shocking loading system made? The Amiga is a very powerful machine and I think that it is unexcusable, it slows the game down entirely too much and is very frustrating.

2. *Sim Ant* - Is it just me, or did Amigas all of a sudden get VGA graphics? I think a simple slip like that could easily confuse a younger reader.

3. Your reviews are biased. I have never seen a bad review. I know that is probably because you only review decent software. How come? Other examples do exist.

Anyway on to the other point. Would it be possible for anyone to send in a review and get it published, as I might do a few. Also is there any cash in it?

Finally, why don't you offer a spe-

cial subscription offer? Like a free game or something? It would encourage a lot of people.

Cameron Germein
Western Australia

Ed: Boy, I bet you feel better now you've got that lot off your chest! To answer your complaints and questions in order:

1. You're right about the loading system in *Titus*. It's very frustrating. But to my mind, the game play is so good that it's worth the frustration of waiting.

2. Sprung! You're absolutely right. Amigas aren't due to get VGA quality graphics until the end of the year. I could pretend I played the game on a secret prototype of the new Amiga 4000, but the truth is I originally reviewed the game on a PC compatible; graphics and gameplay on the Amiga are virtually identical, so the review wasn't re-edited - which it should have been. Sorry for the confusion.

3. Our reviews are definitely not biased. However, as you point out, the games we review are generally the best of the bunch. That's because we have limited space - and who wants to read about the worst games? Mind you, at times we're brutally honest. Check out the Quickshot reviews in this issue for an example. Our policy is to review without fear or favour.

Finally, it is possible for almost anyone to have reviews published. However, we do draw the line at whingers like yourself. (Just kidding! Send us a sample of your work, and if it's good enough, we'll be in touch.) And subscription offers are handled by the business gurus in charge of the magazine. They'll consider it.

On the Road Again

Dear Phil, Please send us a copy of the ACAR Hints Disk. By the way, our Amiga 500 is set up in a 1954 Bedford Bus converted to a mobile home and Ami is one of the first things to be set up whenever we set after a move. We're seasonal workers.

Peter Weidl
Queensland

Ed: Nice to hear from some travelling Amigos! I guess there are plenty of readers using their Amigas in strange places. Drop us a line if you can top Peter's on the road experiences.

Amiga PD Mini-Mag

Dear Phil, Could you please mention to the readers of this magazine that I am starting up an Amiga user group/PD library and Mini magazine for members. PD disk will cost only $2.50, postage included.

If interested, contact Tam, 34 Dudley Street, Mt Druitt.

Tam
Mt Druitt, NSW

Ed: Done! Hope you get a good response.

A Few Wing Tips

Dear Phil, May I first say what a great magazine this is. Keep it up. Secondly, I would like to answer Michael James question on *Wings*. To become a first Lieutenant, you have to keep slogging away at it. The more you fly, the higher you rank.

Alexander Barrett

Ed: Thanks for the help, Alex. We'll try to keep up the high standard!

Technical Talk

Dear Phil, What I would like is some advice. I own an A1000 and want to get a memory expansion. But I don't know of any for the A1000. Why couldn't Commodore just make 1/2 meg expansions like for the A500. So, what should I buy, how much and from where?

By the way, keep up the outstanding work on the magazine. It's brilliant.

Grahame Welsh

Ed: Look, I know this is the friendly end of the magazine, but this is ridiculous! Technical stuff should be addressed to the technical types at the business end of the mag. This page is for fun stuff.

There are plenty of third party manufacturers who should be able to help you with memory expansion on your A1000. If you can't find any advertisements in this magazine, contact Tim at Megadisc, and ask him to put you in touch with Chris Ralph - Chris is a hardware genius who upgraded my old A1000 on the cheap. Maybe he can do yours?

First Aid for Indiana Jones

Dear Phil, In the May '92 issue of your brilliant magazine, you printed an Amiga guide to the *Indiana Jones and the Last Crusade* adventure. I found this very helpful, but in the castle, whereabouts do you find the KEY and the FIRST AID KIT? I have looked everywhere for them without success. Also, what do you say to the guards so that they let you pass?

Nicholas Grant

Ed: Stay tuned, Nick. Hopefully we'll soon have an answer.

CDTV Arcade Games

Dear Phil, Looking at the range of CDTV software, I was wondering whether they could produce arcade coin operated games. Most arcade coin-up games are fantastic and need two or more buttons. The control pad can handle this. Also, do you know any CDTV titles that are coming out?

A. Reader

Ed: The problem in producing genuine arcade quality games on the CDTV isn't just the number of buttons - it's the fact that arcade machines use dedicated high power processors with a lot more grunt than you'll find under the hood of a CDTV, which is really just a glorified Amiga 500. Mind you, the quality of most new Amiga games ain't that bad!

Trainee Rambo

Dear Phil, I would like some tips how to finish level 2 of *Rambo 2* and level 1 of *Rambo 3*. I have a C64.

Mark H.

Ed: Okay, Mark H, whoever you are. We'll see if anyone can come to your rescue.

ENTERTAINMENT HINTS & TIPS

Send your game hints and tips to Phil Campbell, PO Box 23 Maclean NSW 2463. If you send your hints on disk with a SSAE, we'll send you a free copy of our new ACAR Hints Disk Number 2!

Robocod

Thanks to Paul Lawrie, from Allenstown Qld, who sent in what he claims are "all the *Robocod* and *Simpsons* cheats on the face of the planet." Here they are ...

1. EXTRA LIFE - On the first world, collect the spoon at the beginning (on the left) and jump up. You should get an extra life.

2. INVINCIBILITY - At the beginning, jump up to the top of the blue building and you'll see an Apple, an Earth, a Cake, a Hammer, and a Tap. The first letter of each item (as I'm sure you have noticed) are AECHT (an anagram of CHEAT). Collect the objects in the correct order (Cake, Hammer, Earth, Apple, Tap) and you will have invincibility as indicated by a flashing Robocod. This, however, is not permanent. Then, if you enter the first room and then exit straight away, via the left-hand side, all the doors in the main area will open.

3. INFINITE LIVES - On the first level, try collecting these items in order: Lips, Ice Cream, Violin, Earth and Snowman (it spells LIVES of course) to receive infinite lives.

4. INFINITE LIVES AGAIN - Hold down the CONTROL (CTRL) key and press RETURN. If the shield runs out (if you collect another shield) then just repeat again. This cheat will also open the doors.

5. LEVEL SELECTION - While playing, type LITTLE MERMAID (including the space) to make the screen flash. Now press M and enter the level you wish to play. Enter 50 to see the Ending Sequence. (My RETURN key doesn't function, but if I ESCAPE and then restart, it still works). You will be on this level until you reset the computer.

The Simpsons (Amiga)

Paul continues with these little gems for *The Simpson.*

1. When the title screen appears (where the family is watching the telly) type in COWABUNGA. Now when you start the game you should have infinite lives.

2. Instead of leaping onto the phone booth, try using a coin in it. Bart will then phone Moe's, a person will then come along wearing a purple tracksuit. Spray him to bring the counter down by one.

3. Stand by the last window in the Springfield Retirement Home and blow the whistle. A man will appear throwing money, so grab as much as you can.

4. When you get to the sweet platforms (level two) jump onto the second platform and jump on it three times. It should turn white and carry you across to the other side of the cement.

Thunderhawk

Ben Isles, from Bellbowrie, Qld, sends the following hints for a reader in August ACAR. To destroy the bridge in *Thunderhawk*, says Ben, you must drop a couple of Mk-81 or Mk-82 bombs on it. In order for this to work, when you drop the bombs your helicopter must be above 250 or 500 feet, depending on the type of bomb you're using.

Silkworm

Another reader, who may or may not be the inevitable Mark Harris, tells us that if you want to skip a level in *Silkworm*, simply press P.

R-Type

From the same reader comes the fact that in level 4 of *R-Type* there are two holes in the top of the screen. Go into the second one for the secret stage.

Oh no! More Lemmings codes

Level Codes (one player) Oh no! A reader sent me this complete and hard earned set of *Lemmings* codes - I've lost his name! Sorry about that ... and thanks for all the hard work. Let me know who you are and we'll make you famous in the next issue.

TAME:	CRAZY:	WILD:
L2- IHRTDNCCAD	L1- TFLCAHVFBD	L1- BGISULMJCD
L3- LRTDLCADAO	L2- GLCKHTTGBN	L2- MIPWMICKCH
L4- RTDLCILEAH	L3- NCALVTGHBM	L3- MQUDOCCLCO
L5- TDLCAHVFAQ	L4- CILTTFNIBS	L4- PUEMCMLMCG
L6- DLCIHVTGAJ	L5- CAHSUFNJBH	L5- UDMCCHVNCO
L7- LCALVTDHAG	L6- IHRUGNCKBQ	L6- LKCMHWWOCS
L8- CIMTTDLIAO	L7- LSUGLCALBM	L7- OCALWUDPCF
L9- CAHPUDLJAP	L8- SUFLCILMBE	L8- CKLVUEMQCO
L10- IHRUDLCKAK	L9- WOHCEHVNBH	L9- CAHSTFOBDR
L11- LRUDLCALAH	L10- FNCIHWUOBI	L10- KHRTGOCCDM
L12- RUDLCILMAQ	L11- NCAMUUGPBF	L11- MPTNICEDDL
L13- UDLCAITNAI	L12- BKMTUOLQBE	L12- PTFOCKMEDQ
L14- DLCIITUOAR	L13- CAIPTDMBCK	L13- VOKCCHVFDR
L15- LCALVUDPAP	L14- IHRVMMBCCO	L14- OICOHVVGDM
L16- CILVUDLQAI	L15- MRVMICADCJ	L15- ICGMWVOHDL
L17- CAHRTFLBBL	L16- PVMKCIMECS	L16- CKMTTNIIDK
L18- IHRTFLCCBE	L17- TEMCCHVFCG	L17- CCHRUFOJDL
L19- LRTFLCADBR	L18- DMCIIUTGCM	L18- KHSUFMCKDD
L20- RTFLCILEBK	L19- ICCLVVLHCR	L19- LRWFICELDP
	L20- CIMTVLIICH	L20- SWNICMLMDR

WICKED:	HAVOK:
L1- UFOCAHTNDP	L1- GGHQTGNBFL
L2- NKCOITWODF	L2- IIQTFNGCFO
L3- MCCLWUGPDJ	L3- LPTFNGCDFL
L4- CILVUFOQDQ	L4- STFLGKLEFF
L5- GCHRTMJBEJ	L5- TGNGCHWFFR
L6- IHSTENGCEN	L6- FNGKHVTGFI
L7- MPTLLFEDEQ	L7- NGCLWTFHFG
L8- QVMHGKMEEI	L8- GKLUTNHIFP
L9- VMJGCITFES	L9- GAHSUFNJFP
L10- MHGKIVVGEL	L10- KHRUGLGKFI
L11- LGCLTTEHEP	L11- MRWFJFALFS
L12- GKMUVLJIER	L12- RUFNGILMFN
L13- GGHQUENJER	L13- UFNGAHWNFH
L14- MIRULHGKEL	L14- FLGMHTUOFP
L15- MPUDLGALEO	L15- NGALWUGPFO
L16- QUMJGIMMEP	L16- GILUUOHQFH
L17- UMHGGIUNEM	L17- GAISVLIBGL
L18- DNGIHUUOEL	L18- OHQTDOGCGD
L19- HGCMTWMPEP	L19- MQTDMGCDGL
L20- GIMTULJQEF	L20- STDOGKLEGH

Hall of Fame

We have finally broken the drought with C64 high scores! James McLeod has sent in five scores, but unfortunately only one was good enough to make it into the charts. Sorry James.

Is James our only reader who owns a C64? I think not. So come on C64 gamers, send them in and be part of our illustrious Hall of Fame. As for all you Amiga owners, keep it up!

Send your high scores to Juris Graney, 41 Cameron St, Maclean, NSW, 2463. Please mark clearly whether your scores are for C64 or Amiga. And remember -

NO CHEAT MODES ALLOWED!

AMIGA

ACTN FIGHTER 132,530 R Baker
ALERT 359,700 Robbie Baker
ARKANOID 1,052,610 S Walter
AMAZED 130,500 Chris Turnadge
AXEL'S MAGIC HAMMER 329,800 Aaron Buscumb
BAAL 134,250 Davo
BTTLECOMMAND 334,200 P Cain
BATTLE SQUADRON 99,999,999 (c) Amos Burbidge
BYND ICE PAL. 67,626 (c) C Turnadge
BIO CHALLENGE 29,000 A Sanderson
BLOCKOUT 85,281 Stephen Lark
BOMBJACK 382,310 David Dilkes
BUBBLE + 276,850 (c) Chris Toyne
BLE BOBBLE 2,960,980 K Cameron
SUDOKAN 6:08min (c) M Sorensen
BUGGY BOY 113,260 Phouse Nick
CAR-VUP 484,122 Happy Hacker
CHSE HQ 7,426,060 Phouse Nick
CONT. CIRCUS 4,815,390 Dolly
CRAZY CRS 93,622,590(c) R Cameron
CRAZY CARS CHALL 3,000,000,000!! Michael Summers
CRYSTAL HAMMER 6,787,921(c) Kristy Cameron
CYBERBALL 475,000 David Marsh
DENARIS 53,900 Peter Evans
DIABLO 1,490 Timothy Johnson
DRN NINJA 246,400 R Matthews
DBLE DRAGON 962,355 R Cameron
DOUBLE DRAGON II 187,830(c) Damien Carsburg
EDD THE DUCK 5,820 A Gormly
ELIMINATOR 245,570 Greg Munro
EMERLD MINE Lv 23 (d) T Johnson
FIRE AND ICE 376,750 Juris "The Prophet" Graney
FLOOD 13,135 Matthew Beetson
GEE BEE AIR RALLY 308,726 R Irwin
GIANA SISTERS 87,927 M Beetson
GODS 3,957,622 (c) R. Pitt
GOLDEN AXE 488,6(c) M Beetson
HYBRIS 2,575,100 Darin Smith
IK+ 1,039,200(c) Powerhouse Nick
IMPOSSIBLE MSN 68,380 D Unwin
IMPOSSIBLE MISSION II 67,900(c) David Dilkes
INDIANA JONES LC. c P Nicoll
INDIANAPOLIS 500 37.00sec/ 243.24mph Ian Klauss
INERTIA DRIVE 33,600(c) A Gormly
KARATE KD II 54,000 M Summers
KILNG GME SHW 699270 D Thompson
KLAX 4,396,040 Happy Hacker
LEATHERNECK 86,500 S Crosland
LIVE & LET DIE 96,520 M Beaton
MAJOR MOTION 50,658 O Webster
MENACE 996,481 Kamikaze Andy
MINDWALKER 306,214 P Schumacher
MOUSETRAP 71,977 Davo Rich
NARC 180,800 Damien Carsburg
NINJA MISSION 66,528 Chris Toyne
NITRO 283,000 (c) B Bannerman
NUCLEAR WAR 920 (c) Matt James
N. Z. STORY 546,695 E Beaton
ONSLAUGHT 39,918 A Gormly
OPERATION THUNDERBOLT 166,400 Andrew Gormly
OPERATION WOLF 355,680 G Wilson
OUTRUN 32,150,464(c)DA Smith
OFFSHORE WRR 628,345 J Booth
PACMANIA 3,250,140(c)A Burbidge
PNBLL DREAMS 324,877,508 P Lawrie
PINBALL MAGIC 332,390 T Chilcott
PINBALL WIZARD 3,893,570 S Hose
PIONEER PLAGUE 35,412 Keir Sooby
PLUTOS 299,000 Davo
POPULOUS 347,990 Michael Summers
PORTS OF CALL $3,654,944,000 Status 1033 Troy Clarke
POW 612,865 David Thompson
RAINBOW ISLANDS 9,999,999 (c) Timothy Johnson
RAMPAGE 212,912 Graham Wilson
RICK DNGROUS II 68,450 S Southurst
ROBOCOP 375,520 Michael Summers
ROTOX 183,050(c) Faye Doherty
SIDEWINDER 904,350 S Elsley-Eades
SLKWRM (H) 9,963,360 (c) R Cameron
SILKWORM (J) 2,369,571 K Cameron
SKWEEK 3,375,400 Faye Doherty
SPACE ACE 22,140 Neville Clarke
SPCE HARRIER 210,855,250 Maverick
SPEEDBALL 17,650 Amos Burbidge
SPEEDBALL 2 394-2 Matt James
STARWARS 5,722,822 wave 33 C. Mingos
STRIDER 175,350 Neil Young
SUPER CARS 24 races D Thompson
SPER HANG-ON 25,042,850 D Worthy
SPER OFF-ROAD $350,000 A Gormly
SUPER WONDER-BOY 93,750 Juris "The Prophet" Graney
SWIV(HELI) 2,106,210(c)R.Adams
SWIV (JEEP) 1,788,100 S McKinlay
SWORD OF SODAN 403,500 Steven Begley
T.M.N.TURTLES 546,600(c)J Leeken
TERMINATOR II 53,968 (L6) Shane "Loopy" Hoffman
TST DRIVE 169,437(c) S. Demchinsky
TEST DRIVE 2 659,992 M Summers
TETRIS 39,586 (774 Lines) C Lewis
TETRIX Level 232 Stephen Lark
THE RUNNING MAN 123,500 D Rucci
THUNDERBLADE 2,034,040 De Moose
THUNDERCATS 522,300 S Southurst
TOWER OF BABEL 25,934 (c)S Lark
TURBO OUTRUN 100,260,819 Matthew Mantle
TURRICAN 1,735,100 (c) Adrian Jenkin
TURRICAN II 3,307,700 (c) M Beetson
TV-SPTS BSKTBLL 192-39 Matt James
TV-SPTS FTBLL 189-0 D McKinney
TWINWORLD 24,640 Carol Love
TYPHOON 54,255 Owen Webster
U.N.SQDRN 762,255 (c) T Stojanouski
VIRUS 19,801 Scott Southurst
WHIRLIGIG 28,210 Nathan Allen
WINGS 432 kills Robert Irwin
WINGS OF DEATH 58,670 Robert Irwin
WNDER BY 381,166,042(c) K Cameron
XENON II 1,107,260(c) Mark Porta
ZOOM 67,051 Steve Jones

COMMODORE 64

ALLEY CAT 1,101,150 Simon Mitchell
ALTERED BEAST 312,400 Rick Zanker
ARKANOID 930,340 Joseph Wright
ARKANOID 2 758,250 Mean Max
BATMAN 521,350 The Joker
BATMAN-THE MOVIE 1,087,080 Michael Bradley
BANGKOK KNIGHTS 39,600 J Smith
BOMB JACK 521,820 Adam Wade
BLE BOBBLE 6,963,930 (c) D Gavrilovic
BUGGY BOY 182,790 P Murray
CABAL 194,450 The Joker
CHASE HQ 11,366,900(c)Happy Hacker
CHASE HQ II 29,100 (C) Adam Wade
CREATURES 10,123 Adam Malinowski
DAVID'S MID MAGIC 669,150 Joker
DOUBLE DRAGON 35,820 (c) A Prasad
DOUBLE DRAGON II 255,190 Nick van Heeswyk
DRGN BREED 496,870 Happy Hacker
FAST BREAK 136 to 9 Chris Byrne
GHOSTS AND GOBLINS 325,600 Adam Wade
GHOULS AND GHOSTS 558,110 (c) Adam Wade
GIANA SISTERS 287,100(c) A Wade
GRYZOR 228,600 Mean Max
H. MARADONA Lvl M N. van Heeswyk
HAWKEYE 207,650 Adam Wade
IKARI WARRIORS 308,300 J Aldridge
INT. KARATE 139,300 Paul Millward
LAST NINJA II 19m05s (c) Marc Bell
MIDNIGHT RESISTANCE 28,540 (c) Dennis Pike
MEGA GIANNA SISTERS 328,746 Mean Max
NEMESIS 1,633,200 Adam Wade
OPERATION THUNDERBOLT 78,600 Adam Annen
OPERATION WOLF 776,350 W Diaz
OUTRUN 16,952,780(c) Adam Wade
PARADROID 103,080 Chris Nilsson
PAPERBOY 103,100(c) John Nunes
PIRATES 143/100 D Steward
POWERDRIFT 872,940(c) Adam Annen
QUE-DEX 639 Chris Byrne
R-TYPE 1,890,210 Atul Prasad
RAINBW ISLDS 7,653,241 A Malinowski
RAMPAGE 180,000 Adam Wade
RICK DANGEROUS 66,280 A Annen
ROBOCOP 237,170(c) Adam Wade
ROLLING THUNDER 417,280 A Wade
SALAMANDER 235,300 P Millward
SHINOBI 664,372(c) Winston Diaz
SILKWORM (Heli) 985,200 (c) A Blanch
SILKWORM (J) 244,500 (c) A Blanch
SKATE OR DIE Frees 22,850 The Joker
ST FIGHTER(c) 168,900 A Wade
SUPER CYCLE 223,040 A Gormly
TARGET RENEGADE 330,450 C. Byrne (clocked)
TEST DRIVE 36,144(c) John Nunes
TEST DRIVE II 249,543 (c) A
Batroc TETRIS 35,335 (459 lines) A Annen
THE TRAIN 9,500(c) Adam Annen
THNDERBLDE 1,734,040 T Morrison
THUNDERCATS 269,500 J Wright
T.M.N TURTLES 4340 James McLeod
TRAZ 54,560 Dave and Sue Upton
TURRICAN 1,239,040 Adam Malinowski
UNTOUCHABLES 70,230 S Watford
WIZBALL 999,999 (c) G. Beaven
WONDERBOY 560,320 Happy Hacker

Scores followed by (c) indicate that the game has been completed.

MICHAEL SPITERI'S Adventurer's Realm

Welcome once again to the world of Adventurers' Realm, the place where all your adventure and roleplaying get solved. There is a huge network of clever contacts from all around the nation who are willing to provide help (write away for a complete listing), or you can write to Kerrie in the Hint Sheet Department where we have free hint sheets for the more popular games.

If you have no luck with the clever contacts or the hint sheets, send me your problem, and if I cannot help then I'm sure someone else can.

Problem solving isn't our only service. You can advertise your adventure games to swap or sell, and you can air your views and grievances here as well!

General correspondence and problems should be sent to: Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810.

For roleplaying hints & tips, drop a line to Andy Phang in The Dungeon ... Realm's Dungeon, PO Box 1083, Canning Vale, WA 6155.

ALWAYS ENCLOSE A STAMPED ADDRESSED ENVELOPE WHEN WRITING TO THE REALM.

Free Hint Sheets

Firstly, congratulations to the Aussie team at the Barcelona Olympics - what a great effort! Kerrie, the Lady of the Realm, was so excited by the Aussie team's swimming efforts that she is now doing the backstroke through your mail faster than ever. We could have a gold winning performance here. Anyway, keep her busy by sending in your requests for free,free, free hint sheets!! You can choose up to any four from the following list - but you must enclose a stamped addressed envelope, or you'll find your request in the bin!

The address to write to is: Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810.

Corruption, Pool of Radiance, Zak Mckracken, Maniac Mansion, Indy, Zork 1, Zork 2, Zork 3, Bards Tale I, Bards Tale II, Bards Tale III, Guild of Thieves, Jinxter, Pawn, Fish, Uninvited, Deja Vu, Hampstead, Hitchhikers Guide to the Galaxy, Faery Tale, Borrowed Time, NeverEndingStory Pt1, Dracula Pt2, The Hobbit, and the Clever Contacts Complete Listing.

Affordable Multigame Hint Books

Computer Adventure Games: Hints & Tips is the name of the second official adventurers realm hint book. Ten bucks will buy you a book packed with detailed hints and tips for over 25 adventure and roleplaying games, plus tens of mapping pages. The book should be available from newsagents all over the nation. If your local one doesn't stock it, then make em!! The book is distributed by Network (the same mob who distribute the magazine). For more information, ring Darrien on (02)398 5111.

If you missed out on the first official adventurers realm hint book, we still have a handful of copies left, priced at only $9.00 for hints and tips for over 40 adventure games. Send a cheque for $9.00 to: First Hint Book, 12 Bridle Place, Pakenham, Vic 3810.

Realm's Adventure Chat

Peter Chirn from Westmead in NSW writes ... "Why is your column called Michael Spiteri's Adventurers' Realm when your name is Kamikaze Andy? Are you both the same person?"

MS: Eh? It's called Michael Spiteri's Adventurers' Realm because me, Michael Spiteri, sits at the helm of the Realm. Kamikaze Andy, also known as Andrew Phang, is the beast from the east in the west who was hired by the Realm to deal with all the RPG problems that pour in. Confused? Well you shouldn't be!

Kellie Spiteri (no relation) of Elanora in Qld writes ... "I would really like some information on *Mortville Manor* and *Maupiti Island*. I'm not quite sure what I am doing in either of these adventures. Do you have hint sheets for these two? Seeing you voted *Mortville Manor* adventure of the year I though you may have some tips on these two games."

MS: Despite *Mortville Manor* being

a fantastic adventure, it didn't turn out to be very popular over here. I have included hints for *Mortville Manor* in *Computer Adventure Games: Hints and Tips* (the Second Adventurers' Realm Hint Book), though to get you started, try exploring all the bedrooms when everyone is either at Mass or eating. The cellar and attic conceal some important things!

As for *Maupiti Island*, hints have been very scarce for this game. Gary Nellar of Sunbury in Victoria has just sent the Realm a disk containing solutions to *Legend, Mortville Manor* and *Maupiti Island* (thanks a million, Gary!), so hints for the game will appear among these pages shortly.

Also a big thanks to Matthew Armstrong from Geelong in Victoria for his *Monkey Island II* hint sheet, which will also be made available shortly. Matthew is after *Zork I* and *Zak McKracken*, and to swap for them he'll offer *Police Quest I, Hunter* or *Indy (Last Crusade)*. See Clever Contacts for address.

Some while back, Regular Realmer Dorothy Millard sent me a copy of two adventure games she had written for the C64. I haven't had a chance to review them yet due to the lack of access to a C64. I hope to get reviews done shortly, in the meantime here is some info about the two games. First up is *Land of the Purple Sea*, a game in which you play a scientist who made a slight boo boo and turned the world and atmosphere purple!

You'll meet the Purple People Eater and a giant Purple Cat who has lost his socks. Heaps of magic is required to get yourself out of this mess. Maybe Prince is lurking around somewhere?

The other game *Bridgeton Asylum* has you in charge of an Asylum! Things were not going too bad until you realised that you forgot to lock the doors! Now all ten patients (it's a small asylum) are loose, and you have to get them back - before your boss gets back!

If you would like information on these two games, plus other adventure games for your C64, drop a line to Dorothy Millard at 12 Venetian Court, Croydon, Vic 3136.

Clever Contacts

Usually we have troubled adventurers sending in thanks to Clever Contacts, this month we have Clever Contacts sending thanks to troubled adventurers.

Matthew Armstrong of 11 Harcombe St, Bell Post Hill, Geelong, Vic 3215 wishes to thank all the troubled adventurers who went to the trouble of sending in stamped addressed envelopes and money for photocopies.

Matt can also offer help in *Monkey Island 1* and *2*, Sierra's *Robin Hood, Hunter, It Came from the Desert, Space Quest 4* and *Kings Quest V*. Please send in 50 cents for photocopies.

Bruce Gilbert of Marangaroo in WA can no longer offer his services as a Clever Contact on the account that he doesn't own an Amiga anymore. Many thanks Bruce for all services rendered!

Peter Chirn of 37 Austral Avenue, Westmead, NSW 2145 (email pec@newt.phys.unsw.edu.au) is an avid role playing gamer who can help in the following games: *Ultima IV,V, Eye of the Beholder, The Hobbit* (C64), *Shadow of the Beast I & II, Zak McKracken, Larry I, Time Tunnel* (C64), *Prince of Persia, Indy (Last Crusade)*, and *Phantasie III*, a possibly the new *Pools of Darkness*.

G. Beaven of PO Box 254, Wyong, NSW 2259, would like to increase his services from just offering help in: *Might & Magic 2, Last Ninja, Labyrinth, Head over Heals, Ultima 5* (all for C64), *Eye of the Beholder* (Amiga), to include (for the Amiga) *Eye of the Beholder II, Search for the King, Might & Magic 3*, and *Black Crypt*. If you would like the complete solution to *Eye of the Beholder II*, make sure you enclose $2 to cover photocopy costs.

Problems, Problems & More Problems or the Troubled Adventurers Dept.

Leanne Lederer of Rosemeadow in NSW is first in our queue of troubled adventurers. She is stuck in *Journey*, an old Infocom title released before the great bust. Leanne needs to know if there is any way to mine the reagent in the old mine without Hurth getting killed. Also, is there a way to get Praxix to the bottom of the third pit in the mill without using the elevation spell.

Kevin Moore of Kataming in WA has a few questions about *Knightmare*. He wants to know where to get the items to get him past the trees that say ... have you seen my cup? I have lost my weapon ... I have lost my cover? Any takers for Kevin's queries?

Chris Younger of Mortdale in NSW has just about conceded defeat in *Legend of the Sword* after two years of solid adventuring. He wants to know if you need to sharpen the blunt knife in order to kill the giant worm? If so, where is the piece of granite? If not, how do you kill the worm? Is it necessary to enter the hunter's shack? If so, how does one proceed past the hunter? Finally, how does Chris destroy the mud beasts?

Clever Contact Matthew Armstrong has a few queries. In the old game *Hunter*, does anyone know how to complete the game before running out of time? Then, in *Kings Quest V*, how does one rescue one's family from the glass jar?

Help, Help & more Help or the Smart Adventurers Dept.

Battletech

Michael Goodman back in June asked the questions many adventurers were asking ... WHERE IS JASON'S FATHER!!!

Well, from the pens of Kevin Moore and Michael Bathols, both from WA, we can safely say that daddy does appear in the sequel, *Battletech II: The Revenge of the Crescent Hawks* (currently only available on PC). As for Michael's other *Battletech* problems, in the map room, walk on these planets ... Nesht, Summer, Benjamin, Rycnoon, Skye, Kathil, Achernar, then walk to the control panel on the west wall for your password.

Eye of the Beholder

In August, Matthew Beetson wanted to know was the combination lock is for level 9 in *Eye of the Beholder*. Clever Contact G. Beaven replies ... "There is no combination lock as such in the game, however I think he may be referring to the two hexagonal wall plaques near two doors which he may have confused as combination locks. Therefore, if this is the case, the answer to his problem is to insert a glowing rock into the hexagonal plate to open the door."

Monkey Island II

Then we have Matthew Armstrong, who seems to have taken over Adventurers Realm this month, who has offered relief to the following troubled adventurers ..."I have an answer for Mark Healy who in the May issue wanted to know how to win the spitting contest in *Monkey Island II*. Cheat! You'll need to rig the contest by moving the goals closer to you! Buy the ship's horn from the antique dealer. Blow the horn to divert the crowd then quickly pick up the field flags and rearrange them."

Matthew then goes on to describe who to build up some saliva to spit, which involves drinking some Blue and Yellow drinks (combined) with a crazy straw just before stepping up to the fault line.

By the way, the antique dealer might like the spit plaque!

It Came From the Desert

To Andrew Blazer who was stuck back in April. To see the crystal ball lady, wait till she's home and not talking to anyone. Don't worry too much thought, she doesn't tell you much. To get out of the hospital, use the wheelchair at high speed and head for the lift (located in the middle of the hospital).

Matthew adds "If you are good enough, you shouldn't end up in the hospital anyway. To beat Ice and the Hellcats, drive straight in the middle of the road and aim for Ice. To beat the ants, shoot off their antennae.

Realm's Adventure Quickshots

Here are three hot new adventure and roleplaying games releases from USA that are sure to excite Realmers in Australia.

It took a long time coming, but Sierra have finally released the second Laura Bow mystery, titled *Laura Bow II: The Dagger of Amon Ra*.

In this sequel, you play Laura fresh out of college with a nice journalism degree in her hands. She has just got a job as a cub reporter in New York with her first story being about the burglary of valuable Dagger of Amon Ra.

Well, like most Sierra games, one thing leads to another and Laura find herself neck deep in mystery, murder and intrigue. The adventure features six chapters to tackle, like its predecessor.

Laura Bow II features Sierra's now standard point and click interface, with some great sound and graphics. The game does contain adult subject matter, though not in the tacky style of *Leisure Suit Larry*. Keep your eye out for it!

Virgin have released a new RPG title *Fables & Fiends: The Legend of Kyrandia*. This is a point'n'click style game that has the player casting spells, searching caverns, collecting gemstones and chasing leprechauns. What fun! The game features a series of quests (25, in fact!) in which you play the role of Prince Brandon and his neverending mission to catch the evil court jester Malcolm. The game will be released shortly for the Amiga and PC range.

Last, but not least, soon to be released is the fourth and final part to SSI's *Forgotten Realms* series of AD&D computer games. I am of course talking about *Pools of Darkness*. The storyline is thinly connected to its three predecessors, and it is worth noting if you have played the other three then you have a slight advantage.

The game features nice graphics and sound, and the same interface used in the previous games. You start by doing some little work in Phlan, before you travel via good ol' Elminster to Limbo. When you return to the Realms, things don't look too good. The nice cities are gone, replaced with ugly craters. It is among these craters and caves that the quests take place. The overall plot has you trying to defeat Bane and his nasty servants. Tricky combat sequences run rampant in this final installment, though spell casting is somewhat uncreative.

This new release will no doubt attract players of the previous games who are anxious to complete the series.

The Dungeon by Kamikaze Andy

While some of the bigger companies like Origin are shying away from producing Amiga versions of their games, other publishers are starting to fill the void in the market. One of these is Konami, who plan to put the finishing touches on *Champions* (produced by Hero Software) very shortly.

Champions is a RPG based on the boardgame of the same name, and the computer version is also being designed by the very same creators! You play an ordinary guy by day, superhero by night type of character, and some of the unique aspects include being able to customize your own powers, a strong degree of interaction with other characters in the game (lots of conversations to garner clues - yes, it's a mystery type of adventure/RPG), and there's a possibility of further "mission" disks should this product fare well in the stores.

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Of course, there are still quite a few softcos out there loyal to the Amiga public, and these include SSI, who have finally managed to put *Prophecy Of The Shadow* on the shelves. While the final product was a little less polished than expected, the digitized images and interesting menu interface provided a breath of fresh air from all those previous AD&D Gold Box type systems. Beginning RPGers should definitely check this one out.

As mentioned previously, the next SSI AD&D conversion is *DarkSun: Shattered Lands*, and its release will coincide with the launch of a new science fiction RPG series simply called "M". You must guide a party made up of rebels and renegades in an attempt to rescue a host of officials stranded on the planet Monsoon. Expect some exciting new graphics that will stretch the Amiga to its limits.

Speaking of stretching the Amiga, Sierra (another major supporter of our favourite machine for a long time now) has just announced that its upcoming releases, *Conquests Of The Longbow* and *EcoQuest: The Search For Cetus* will both use 64 colour Extra HalfBrite mode graphics! Amiga adventurers can expect this to be the standard for Sierra's long list of products scheduled for 1993, including *Laura Bow 2: Dagger Of Amon-Ra, Space Quest V, Quest For Glory III,* and *King's Quest VI.*

The Dungeon will be prying into the secrets of these titles next month, with some in depth reporting on the storylines that Sierra plan to serve in their latest round of sequels. Stay tuned, folks!

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Fans of Lucasfilm's Graphic Adventures will be glad to know that *Indiana Jones And The Fate Of Atlantis* has just shipped in the US, and will be on its way here courtesy of Ozisoft. This is definitely one of the best adventures of the year (and it's just as funny as *LeChuck's Revenge*, too), so demand a copy from your local software store. Lucasfilm have not made any plans for further Indy Adventure games, except to hint that the next one might be based on the successful Young Indiana Jones TV series that is currently screening in the US.

The rest of the gang at Skywalker Ranch are busily playtesting *X-Wing*, the space combat simulation based on the *Star Wars* trilogy and hotly tipped to be the biggest seller since *Wing Commander.*

Some more news regarding *Clouds Of Xeen*, the next in New World Computing's landmark *Might And Magic* series of RPGs. The game following *Clouds Of Xeen* will also be set in the same realm, and apparently can be "joined" together with *Clouds* to form an extra large game (with some hidden locations suddenly accessible!). Of course, you will need to have a hard disk big enough to store both games at the same time. The graphics on both have been improved remarkably, with more full screen visuals and colours implemented.

A lot of new RPG/Adventure titles mentioned in press releases by software publishers often take a few months (sometimes even a few years!) after the "planned release date" to materialize. With that in mind, you will probably have to wait until 1993 before you have a chance to try out Spectrum Holobyte's attempt at converting *Star Trek: The Next Generation* onto the Amiga (it's rumoured to be a mixture of adventure and simulation).

Interplay's own *Star Trek* game is out now, and will be followed by a disk filled with new missions AND a sequel, sometime next year. The sequel to one of the big hits of this year, Dynamix's *Willy Beamish*, is also running late (mostly due to some internal strife within the company) and again, look to 1993. Dynamix is certainly establishing itself as an independent software publisher, bringing out a new RPG with digitized graphics and animated combat based on science fiction writer Raymond E. Feist's Riftwar Legacy books.

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And finally, to end off this month's proceedings, it seems that Activision is doing quite nicely with its repackaged *Lost Treasures Of Infocom* (I and II) across all formats, including the Amiga. For those who don't know, the *Lost Treasures* are compilation packs of classic Infocom text adventures complete with manuals and cluebooks, but unfortunately none of those wonderful extras that made each individual Infocom package a treasure in itself. In fact, so chuffed is Activision with all this interest in Infocom, it plans to release a new graphic adventure based on the Great Underground Empire, so we Zorkers will finally see what those legendary mazes look like.

Quickshots

Take a quick look at the latest games

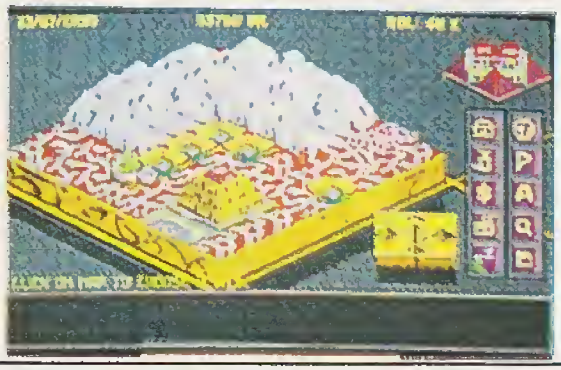
First things first. Don't bother reading any further if you don't already own a copy of *Utopia*. Mind you, you should have - it's one of the best world-sims yet. But if you havent' got it, the *New Worlds Datadisk* will only be useful as a drink coaster or a placemat for very small plates.

If you're already a *Utopia* player, though, these new worlds are very exciting. The graphics, as in the original game, are astounding. You'll face ten new worlds and ten new strange evil alien races, each equipped with more formidable weaponry and superior tactics. The aliens are meaner, the terrain is harder and the peasants are more revolting than ever.

What more can I say? You'll simply have to discover the new worlds for yourself. One word of advice ... if you're still a novice in the original *Utopia*, don't rush into this purchase. It's genuinely tough going, with much more of a challenge than the original worlds.

Dave Sanna
Mindscape (02) 899 2277

Ratings:	
Graphics:	89%
Sound:	78%
Gameplay:	87%
Overall:	86%



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How should I explain *Air Bucks*? Well, I think the easiest way to describe it would be that is *Railroad Tycoon* without the Railroad. Instead you are the controller of an air company, aptly named AirBuck$. You have forty years to make your company the company with the highest turnover, largest fleet and most air routes in the business. Although this seems to be a long time limit, it isn't as easy as it may seem.

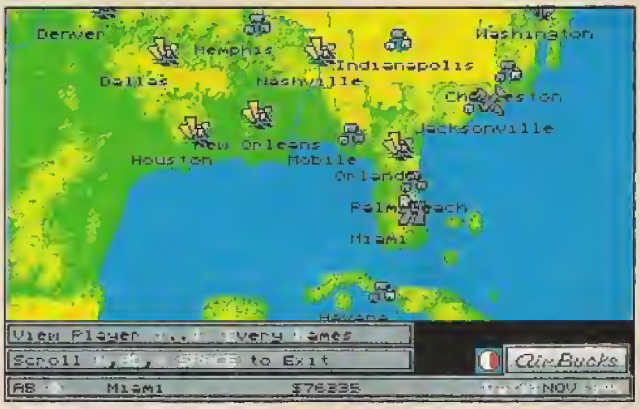
Like most games of this genre, you have a money limit. In *Air Bucks*, it's $100,000. You also start off with a small Dakota DC-3. It is up to you to make the key decisions which will decide whether your company will mature into a globe spanning empire, or wither and fail. So far, my companies have withered and failed pretty well. I haven't made it into the second year without the computer telling me how usless I am as a manager.

The graphics of *Air Bucks* are nothing to write home about. I personally think that graphics don't matter, as long as you have a decent plot and addictive gameplay. I'm sorry to say though, this game doesn't show any signs of either. Even my dad, the hardiest of simulation players, didn't enjoy this game. The sound is very ordinary and the music is pitiful.

Without sounding like a critic of all sim games, *Air Bucks* does show one good sign - as soon as you make it past the first year, being the company with highest turnover, largest fleet and most routes, the game does get quite interesting. Otherwise don't even bother about buying *Air Bucks*.

Juris Graney
DirectSoft (02) 489 7853

Ratings:	
Graphics:	56%
Sound:	43%
Addictiveness:	50%
Lastability:	49%
Overall:	51%



Might and Magic III

There are so many RPGs available these days that it's hard to know which way to turn. Last month I reviewed *Eye of the Beholder II*, this month it's *Might and Magic III*. Maybe the year after next it'll be *Eye of the Beholder XXIX* and *Might and Magic LXXIII*. Who knows?

But at this stage, let me fill you in on a few details of *Might and Magic III*, and draw a few comparisons.

MMIII is a very large game in terms of its playing area. This is evident by the use of five disks, and even then you have to use two of your own. This poses quite a hassle if you are not the owner of the blessed second drive!

As usual, you're controlling a merry band of adventurers - a larger party in this game than in *Eye of the Beholder II*. The only disadvantage here is that you don't get to choose what type of characters you want at the beginning of the game. Even so, your adventurers are highly configurable. And this is where to my mind it gets complicated. You have simply too much information to worry about - right down to the size of your team member's shoe sizes. Do you want an adventurer to wear boots weighing 700 grams or 4 kilograms? Personally, I couldn't care less!

What I found to be a very good feature in this game was the use of graphics on the playing screen to tell you that a spell has been cast, and how long it will be until it wears off; there are also graphics to warn you of danger, and to tell you which direction you are travelling.

Generally, though, if top class graphics are what you are looking for then look elsewhere. The pics are okay, but definately not state of the art. When you're fighting against your enemies, whose graphics are average, you won't see any axe wielding or knife throwing - animations are few and far between. Most of the graphics look as if they have been drawn small and then enlarged.

As in any adventure game, if you decide to turn on the music after about half an hour the two minute tune becomes totally unbearable. I played with the music option off. Sound effects, though, are fine.

To my mind, *Might and Magic III* isn't as appealing as games like *Eye of the Beholder II*. But it's your choice - and if you like to be swamped in a sea of details, then this game is definitely for you.

Dave Sanna
Electronic Arts (075) 911 388

Ratings:	
Graphics:	65%
Playability:	70%
Lastability:	69%
Sound:	65%
Overall:	70%

Myth

Ready for a quick taste of hell? It's not a pleasant place, says Phil Campbell, as he takes you on a quick tour of the place of the damned.

It's been one of those days. My poached egg exploded in the microwave, the kids have been tearing each other to pieces since a few minutes after dawn, and the image on my Commodore 1950 multisync monitor is rhythmically contracting from the edges. Or maybe it's just my eyes.

"All in all, a helluva day," I grumble to nobody in particular as I rip the shrinkwrap off *Myth*, an Amiga game that's had rave reviews in the overseas press. The opening is splendidly evocative. The music track is haunting. And flaming letters set against a tar black background pick out the title of Level 1 - "Hades, Realm of the Damned." Hmmm. I think I know how they feel.

Now let's be clear about this from the outset. *Myth* is not a pleasant game. If you don't like skeletons, skulls, and lakes of fire, stay well clear. Because *Myth* throws you right into the middle of an ancient Graeco-Roman nightmare, loaded with nasty pagan deities, wraiths, nymps and harpies.

But if you like that sort of stuff, meet Ankalagan, Son of Broth. He's the last survivor of Queen Boudicca's army; his wounds were tended by Herex the Druid, who schooled him in the ancient arts. And he needs all the help he can get - Ankalagan's Roman enemies are in league with the gods, led into battle by none other than the war-god Mars himself.

Ankalagan stands at the top lefthand corner of my still rhythmically contracting screen, ready to do battle with the most menacing collection of foes I've seen since I walked down Sydney's George Street on a Friday night. A few steps along his precarious rocky ledge there's a skeletal warrior; just a shadow of his former self, but he still wields a mean broadsword. Every few moments, small, flying dragons appear in his path - annoying pests, and deadly to the touch.

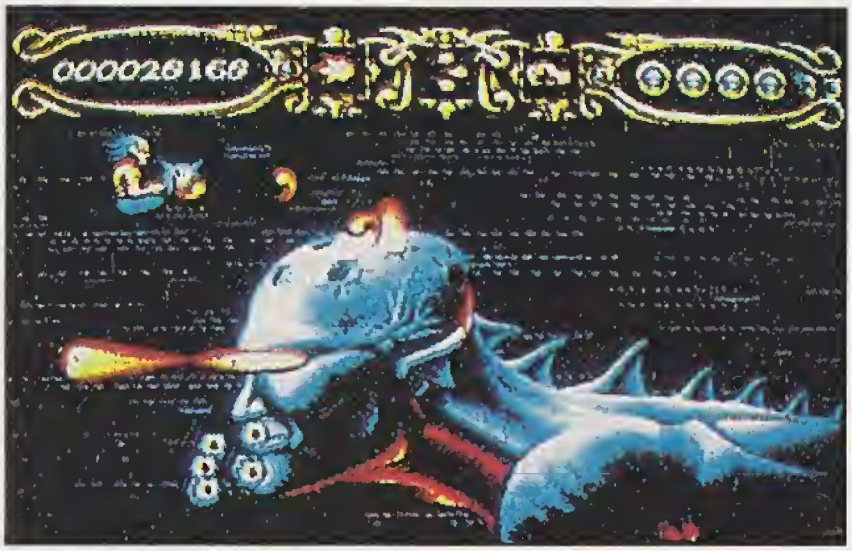
My warrior's only weapons at this stage are his hands and feet - it's typical beat-'em-up fare, with joystick thrusts governing a range of punches, kicks and jumps. Three direct hits on a skeleton will leave it lying in a crumpled heap; listen for the superb bag-of-bones sound effect as he drops. Killing the flying dragons is harder, but more rewarding. They leave behind fire-ball bonuses; grab one, and you're in business. Keep at it, and you'll eventually earn a sword, then a trident, and you're ready to tackle the multi-headed meanie at the end of the level.

I've still got a long way to go. I've hacked and slashed, I've kicked and punched, I've jumped from precarious ledge to ledge - and more often than not, landed in the lake of fire. Tricky stuff; it's a neat combination of beat-em-up, platform and adventure games. And I've seen enough to know that *Myth* is a top quality contender. Graphics are top notch, sound effects are superb, and playability is above average - in other words, a game that takes the Hades theme to new depths.

Distributed by Electronic Arts (075) 911 388. RRP Amiga $69.95.

Ratings:

Graphics:	84%
Sound:	86%
Gameplay:	84%
Overall:	85%



Has a game with low class graphics and almost no sound effects got very much to offer? Greg Munro says a definite yes! Read on as he pits his brain against the machine in ...

Operation Com*bat

OPERATION COM*BAT is, as the pun in the name suggests, an animated COMputer BATtle game. It has basic graphics, simple rules, and only a few different types of pieces. But it is a game which generates fairly complex tactical situations. If it were a board game, it would be more like chess than *Blitzkrieg* or *War in Europe*. Don't expect bells and whistles (just explosions), but if you like pitting your brains against the computer or a friend in an intense tactical struggle, then you'll enjoy this game. I did. And there's something else about it I haven't told you yet ... so read on.

The graphics and SFX are about on a par with a good C64 game: not appalling, but hardly something for Gary, Denise and Agnes (your friendly custom chips) to get excited about! There is a good reason for this. *COM*BAT* is designed to be played over the phone via a modem, and it comes in three versions - Amiga, Macintosh, and IBM. This is the trade-off for the ordinary graphics. You can play against a friend several suburbs away (or further if you can afford the STD rates!), even if she or he owns one of those inferior machines! Or, you can hook up two computers with a serial cable. (Of course, you then have to buy two copies of the game!)

Actually, I have to admit that I haven't tried the modem option, so you'll just have to take Merit Software's word for it. However, the manual contains seven pages of clear and simple instructions for using the game over the phone, plus a three-page troubleshooting section. Four baud rates are supported - 300, 1200, 2400, and 9600.

Let me tell you more about the game. There are two armies - blue and red. You can be either, and play against a human or computer opponent. The computer plays at novice, expert, and master. I found expert to be hard enough! There are six Battlefield Terrain maps, ranging from Jungle to Desert. There are four scenarios to pick. Each has a different ratio of combat vehicle types. There are five types of ground vehicles, and optional air support.

Each vehicle has different values for Defense, Mobility, Gun Range, Gun Power, Ammo, and Fuel. Four of them are attack vehicles - Light Artillery, Light Armour, Heavy Armour, and Heavy Artillery. They look respectively like: a jeep with a missile launcher; a tank with one barrel; a tank with two barrels; and an artillery battery on wheels. The fifth, Supply Vehicle, is a truck that carries ammo and fuel for resupplying the attack ordnance.

A turn involves moving your pieces with the mouse (the game is entirely mouse driven), firing on your enemies, and, if desired, calling air support. Air support is a rather chunky looking aeroplane which randomly strafes one line of the terrain map and reveals enemy positions. Pieces only move in the four cardinal directions, not directly diagonally, and your path may be blocked or slowed by terrain characteristics. You can shoot in only eight directions. Each ordnance type has a different range and inflicts various damage. When a piece has taken maximum damage according to its defence value, it explodes out of the game. A turn ends when all pieces have moved, when the turn is handed over, or when the time expires. You can set the turn timer to anything from 120 to 600 seconds. To win, an a player must destroy his antagonist's HQ. It is possible to have a stalemate if a player who has destroyed all his opponent's ordnance then runs out of ammunition or fuel and has no supply vehicles left.

Overall, I give *Operation Combat* the thumbs up. If you like (or would like) to play games over the phoneline, you should buy it. Even if you don't, it's a challenging game of tactical skill, despite the ordinary graphics.

Distributed by Dataflow 310 2020. RRP $29.95.

Ratings:	
Graphics:	55
Sound:	40
Playability:	85
Addictiveness:	90
Overall rating:	70

Warriors of Releyne

Veteran strategist Andy Phang takes on the wicked Warlord Turellin in a neat blend of fantasy and wargaming. Here's his report from the front.

Some software companies have become synonymous with the types of games that they publish. Mention the term "role playing" and immediately you think of Origin, or mention "graphic adventure" and the word "Sierra" pops to mind. Now, it appears that UK software house Impressions is trying to garner similar recognition in a specific genre of computer gaming, namely the strategy arena. *Warriors Of Releyne* is the latest offering from Impressions, and it's yet another mix of strategy and wargaming in a fantasy environment.

The land of Releyne is under the threat of invasion from the bad, vile, disgusting, and downright nasty forces of a neighbouring continent, Dharaki. While the orcs and trolls that make up the Dharaki population have previously been a confused and disorganized group, the rise of the bloodthirsty Warlord Turellin has seen the unification of the power of evil and hence the threat to this world as we know it. What makes the situation even more dire is the unwillingness of the Emperor of Releyne to acknowledge this threat.

It's now up to you, one of the legendary Wind Riders (greatest of all heroes throughout Releyne) to organize the defence of the realm before the final confrontation with the might of the Dharaki.

So, after loading the game, you will see the battleground - a large wargame-like map (with those traditional hexagonal grids that can be turned on or off). Gameplay is handled in a series of turns: when it is your turn, you can move your armies, initiate combat, cast spells, and so forth. Then it is the turn of the Dharaki to move, and you can be sure that they will counter all attacks with equally venomous force (as I unfortunately found out on many occasions).

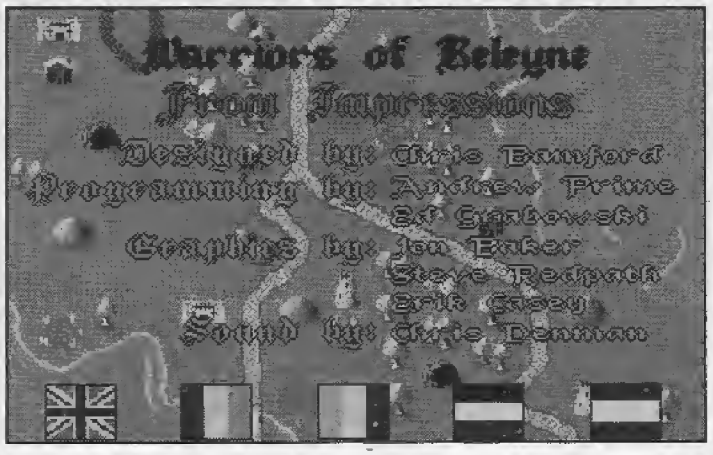
When the Dharaki have finished their handiwork, any neutral characters in the story may make their move. Neutral characters do not aid or hinder either the Releynian or Dharakian sides, unless you manage to convince them to join forces with you. Don't try to intimidate them, though, otherwise they are likely to enlist in the cause of the Dharaki!

Armies can be made up of different types of creatures, and due to its fantasy setting you will encounter a few elves, one or two centaurs, wizards, villagers, goblins, bandits, hobbits, unicorns, trolls, dwarves, those ever popular orcs, and maybe even a partridge in a pear tree. Each of these characters have been given individual statistics in various abilities that may influence the outcome of the battle. For example, you can expect the friendliness value of the orc to be nil when it comes to their personal opinion about you. If the orc has a high attack value coupled with a lot of movement points, you might end up being very sorry at not being much nicer to the poor misunderstood guy when you had the chance.

As in most wargames, terrain also plays a significant role in moving your fighters. Marching through areas made up of swamps, marshes, mountains, grassland, rivers, coastal areas, and forests can often be difficult, especially if your armies do not have characters with a lot of movement points. Certain types of terrain such as swamps and mountains can eat up movement points very easily, making them hard to cross. This can then adversely affect the attack and the defence capabilities of your forces, potentially reducing these respective values by half or even more! On the other hand, if you happen to encounter enemy groups on favourable battlegrounds, then your attack and defence values are likely to increase.

Graphics are nothing to shout about - colourful in parts but not spectacular by any means. The interface is quite simple to use, with icons depicting the possible actions you can perform during your turn. Just use the mouse to point and click.

Warriors Of Releyne comes on two disks: A Game disk with a number of scenarios, and a Construction disk that allows you to change any part of the Game disk scenarios, and also to let you create your own scenarios. A tip of the hat to Impressions for including this Construction disk, which makes the game much more interesting and gives it extra playability value. Overall, Impressions have released another solid product - not flashy, but interesting for its intended audience.



Ratings:

Graphics:	65%
Sound/Music:	85%
Gameplay:	75%
Overall:	75%

D/GENERATION

Here's a game that's got absolutely nothing to do with the TV show of the same name. But that's okay, says Juris Graney, because it's pretty good fun.

Virtual reality meets action adventure' reads the cover of the box. A face of despair looks menacingly out from the box into my eyes. I stare back, but have lost all control. I take off the lid, and to my complete and utter surprise, I see a large instruction manual and two disks. Why can't they use a bit of imagination and make 3-D holographic images leap out from the boxlid? Grumbling, I boot the first disk and receive a message of distress from my computer chips - "Insufficient memory to load music". I'm totally flabbergasted. This is the first time I have ever had this message, after buying my memory expansion. So, I did what all concerted gamers do - I disconnected the second disk drive. Now it works perfectly.

D/Generation, the game, is no relation to the group of actors and actresses who ran around a television set, impersonating people. Instead, this *D/Generation* is an alien lifeform which has gone completely wrong and taken over a science lab in Singapore. The D/Generation represents an extremely advanced stage of artificial evolution. Equipped with sophisticated neuro-holographic camouflaging, it can disguise itself as anything. It also has a super-hardened dermal layer that acts like a sheet of armour, making it virtually indestructible.

This is the beginning of the worst day of your life. You just happen to be delivering a package to the company when these creatures take over the building. And it seems that you have the only weapon that can kill these creatures. Just one problem - you don't know how to use it. Quick! Find Derrida, the deranged creator of these beasts, and find out what to do. You'll need to know how the weapon works, and where the meanies are most vulnerable.

It's not easy. You'll travel through more than 120 rooms filled with traps and surprises before you find Derrida and deliver the package. Notice in the heading, the blurb said "Virtual reality meets action adventure". Well, here's the bad news. Don't expect any 3-D Virtuality headgear. The only virtual reality you get is the fact that the nasties use "virtual reality" as camouflage.

The action-adventure side of the game a bit more satisfying. You can successfully interact with every human being that you come in contact with, which really makes the game interesting.

As in many interactive action adventure virtual reality games, the screen view is in a cut-away isometric projection. If this sounds like a lot of mumbo jumbo, it basically means that you view the game from an angle of around 45 degress in the Z-Axis. The graphics are quite well drawn, and animation is excellent, and often humorous. The sound effects are also very good. You'll hear electric doors skidding open and closing with a grunt behind you. You'll hear your laser beam zapping across the room and hitting the surrounding walls, bouncing around and finally landing inside deathly looking robots. It's great.

The only thing I can find wrong with *D/Generation* is the fact that the "resume" function doesn't seem to work. In theory, after all your five lives have expired, you have the option of playing from the level in which you have just finished. I got all the way up to level 82 and finally kicked the proverbial bucket - and for some reason I was sent all the way back to level 80. I was throughly peeved!

Overall, *D/Generation* is a smart looking game, with a lot of eye opening aspects. The animations are great, and the overall feel of the game is comfortable and smooth. If you are into action adventure games, this is probably one you should add to your collection.

Distributed by Mindscape (02) 899 2277. RRP $59.95.

Ratings:

Graphics:	76%
Sound:	87%
Addictiveness:	69%
Lastability:	76%
Overall:	77%

Simply the best? The greatest game of all? Phil Campbell checks out the first ever Rugby League simulation, and answers all your questions.

Andrew Ettingshausen isn't just a great footballer. According to a recent magazine poll, he's also the sexiest man in Australia. And to that you could probably add, one of the smartest business operators to come along for quite a while. He's picked a gap in the market - and he's gone for it.

Mind you, sporting simulations are nothing new. One of the first game cartridges ever released for the C64 was a gem called *International Soccer*. It was great, and it spawned a heap of imitations. Rugby Union fans are well served too, with games like *World Cup Rugby* and *World Class Rugby*.

Until now, though, League fans have been out of luck. Ettingshausen was frustrated at the fact that there were no league games in his local computer shop, so he decided to do something about it. "I noticed there weren't any league games in the software shops," said Ettinghausen. "I thought, this has got to be the way to go - I was sure there would be lots of people out there who would love to play League at home."

A quick visit to Sega-Ozisoft set things in motion - and now ET's smiling face beams from software shelves all around the land. And initial sales figures confirm his predictions. The game is selling like hot cakes. And so it should. Because behind all the razza-matazz and publicity, *ET's Rugby League* is a pretty classy product.

There are plenty of options. You can control the action with keyboard or joystick, and play at seven different difficulty levels. Offside and Knock-on rules can be switched on and off, and you can fiddle the weather conditions too. If you feel like a real challenge, try setting the wind strength to high and the ground condition to muddy.

Teams can be juggled to your heart's content - a bonus for armchair experts. I was content to leave things pretty much as they were - I'm controlling Cronulla, and I left "ET" at full-back, and simply swapped Coleman and McGaw.

Time for some action. Rather than play a single game, I chose to go straight to the Winfield Cup; in the first round, Cronulla play Brisbane. The muddy field is not a pretty sight - it's an icky yellowish green. The players stand dotted around centre-field, waiting for the kick-off. The whistle blows, and the game begins - and in moments, Brisbane have scored their first try. My guys are still wandering around in a daze.

By the end of the match, the scoreline reads 23-0 - not one of Cronulla's better performances. In the next round, however, things are distinctly better. We're playing Illawarra, and this time we're really cooking. Illawarra takes the kick off, my player

grabs the ball, and weaves his way beautifully down the length of the field. A wiggle on the joystick here, a waggle there, and ET dives over the line.

Sure, my conversion left a bit to be desired - it's all a matter of timing, with a cross-hair style gadget on the screen setting the direction and power of your kick. But I'll get it eventually.

Overall, *ET'S Rugby League* is shaping up to be a lot of good fun. Graphics are detailed, with well animated players and a good feeling of perspective on the field. Colours are bright and breezy, without much subtlety - then again, Rugby League isn't a particularly subtle game. The gameplay is fast and smooth - though let me give you one word of warning. If you've already got Mindscape's *World Class Rugby* in your software collection, you'll find this game is almost identical - only the names and the rules have been changed.

With the Amiga version retailing at $69.95, and the Commodore 64 version disk version selling at $39.95, *ET'S Rugby League* gets a definite thumbs-up from me. Mind you, I had to say that. I'd hate to get offside with a guy as big as Andrew.

Distributed by Ozisoft (02) 313 6444.

Ratings:

Graphics:	78%
Sound:	76%
Gameplay:	79%
Overall:	78%

WORLD CLASS RUGBY

Here's a treat for Rugby fans! A well mannered Ken Simpson checks out the latest simulation of the sport of gentlemen, and likes what he finds.

Since school days I have loved Rugby. I don't exactly know what it is, why it appeals so much more than league or AFL, but the only winter sport that comes close is soccer. If they do play sport in heaven, Rugby is most certainly what they will play. The grunt and groan of a maul, and the quick moves of the back line are just magnificent. So there you have one of my prejudices.

My other prejudice is that I just have never really found a sport simulator that cuts it. They are all clumsy or about as exciting as a kick in the teeth. Except for a couple of notable golf simulations and an old basketball sim, *One-on-One*, all the rest that I have seen haven't been worth the trouble. So it was with significant trepidation that I undid the packaging and placed *World Class Rugby* in my disk drive.

Problem 1. Copy protected with a strange disk format. You can't copy this baby for safety, even if you wanted to do it as you are legally allowed. But press on regardless I did. I'll admit, the introductory graphics and music were quite good. Not amazing, but solid.

The initial screen gives you four options: OPTIONS, TEAMS, MATCH, and VIDEO. OPTIONS leads you into two more screens, one to set your PLAY options such as length of half, value of a try (yes they even have the five point try in this!), skill level etc. The other screen, CONDITIONS, controls the pitch type, wind, offside and knock-on rulings. You can play almost any team you want from (of course) the Wallabies to the little known USA team. The computer will play the opponent.

This is just to give you an idea of the complexity of the simulation, before you even strap on a boot. You can even choose your own players in the teams, with fitness levels, injuries etc. In fact this part of it all made me feel like I was playing an adventure game. If you prefer, though, you can play just by booting up, choosing which team you want to be, whom to play and go.

Play can be from a total of four minutes (two minutes a half) to a full 80 minutes. I couldn't imagine what would possess you to want to sit at the computer for a full 80 minutes and play Rugby - but you can if you want. Eight minutes was plenty for me.

Control is all by joystick. You push in rucks by waggling the joystick side to side. You pass and kick by selecting a direction and then pressing the fire button. I must admit, I haven't quite got the hang of it yet - but I'm getting there. Some of the best bits are the set scrums and line-outs. Here, you select a set-play to use from a menu of eight, and then the setplay will go ahead without you interfering. Some of them are quite clever. You jump by pushing forward and pressing fire. After a while, it nearly all comes pretty easily.

I got a surprise in one ruck under the posts, I was getting pretty forceful with my joystick trying to push some Argentinians over the line, when the whistle blew and Cutler was sent off! It was hard to push the Argies around with one less person in the pack, and finally they beat us, 15-nil. It wasn't fair - it was a legal ruck!

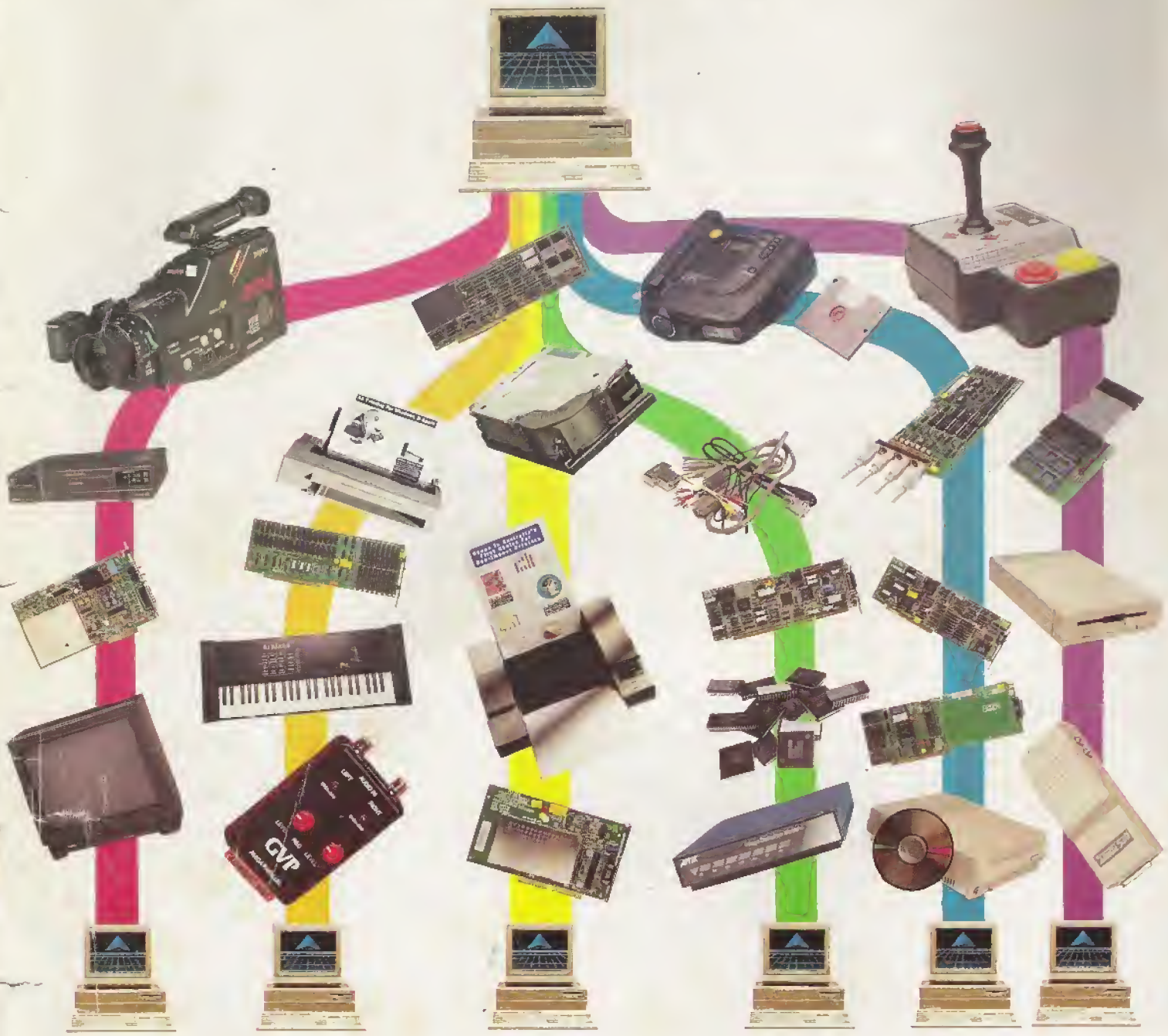
I must admit to being a bit bemused by the wealth of video replay options. You can watch your moves again by pressing a function key, and even save them onto a disk. You can watch it in 2-D, 3-D, or even from a blimp. Slow motion or normal speed. In other words, a pure couch-potato's joy. I didn't use it much as it was more interesting playing than watching it again.

So overall, I like it. The wealth of options at the beginning give the game real depth, yet you don't have to use them all to play the game. The simulation was quite good, though I seem to remember Rugby used to hurt a bit more than this. The lazy part of me likes this one.

Distributed by Mindscape (02) 899 2277. RRP C64 $49.95 Amiga $79.95.

Ratings
Graphics 70%
Sound 85%
Playability 80%
Addictiveness 80%
Overall 79%

Evolution of a species



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